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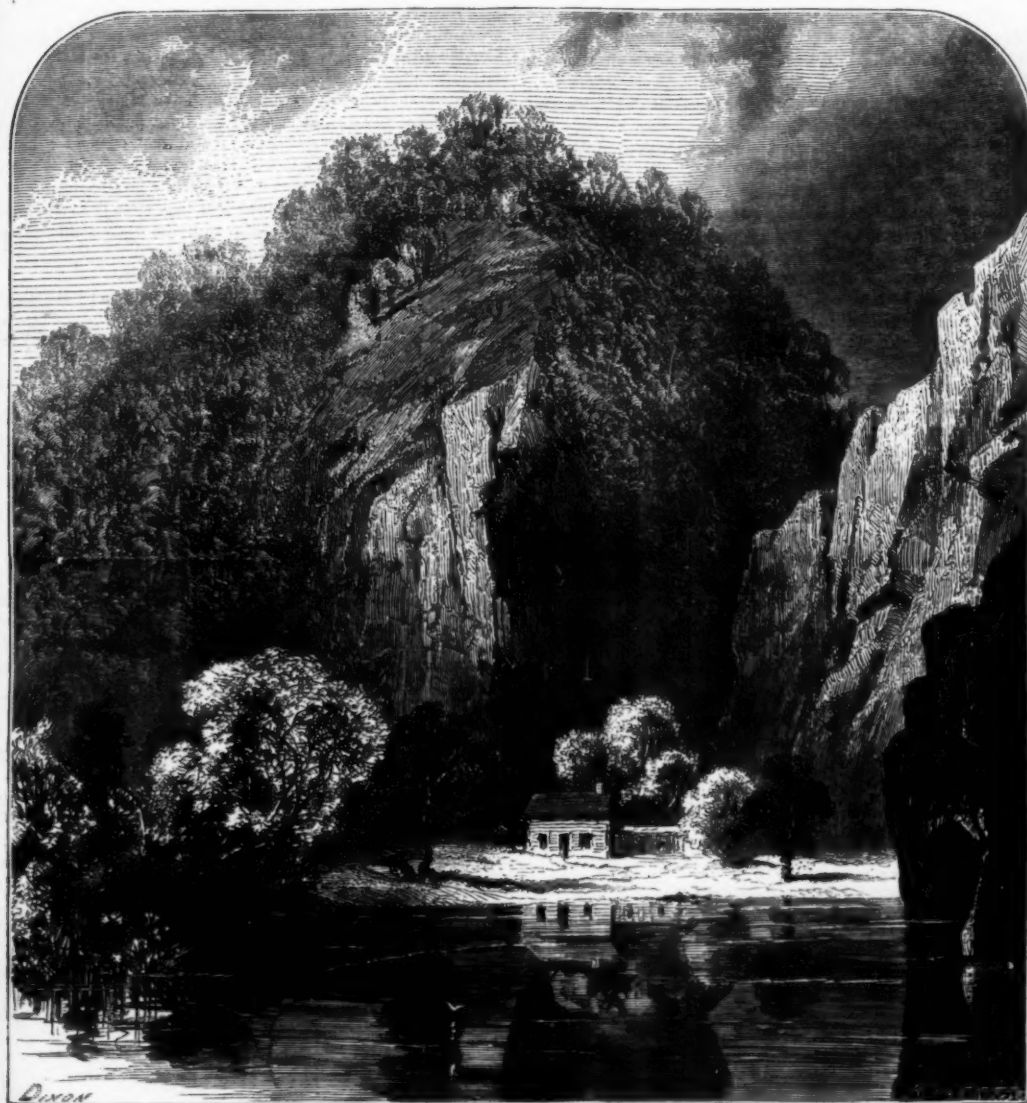
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PICTURESQUE AMERICA.—A NOOK ON THE HUDSON.

OUR VISIT TO MOUNT VERNON.

I FOUND Washington a pleasanter city than its calumniators allow, and not as pleasant as my excited fancy had conjured up. I walked its wide avenues till I was blinded with dust, and blistered, head and foot. I "did" its public buildings without flinching; turned my brains upside down in the vain attempt to study the interior of the dome of the Capitol; coaxed a pair of tight boots to the very top of the edifice; had a good look at both "Houses;" gazed my fill at Sumner, the shaggiest lion of a man I ever saw; caught a glimpse of Revels as he was walking out of the Senate-chamber; saw Butler, who looks so full of fight that it seems forever trying to ooze out on his bald and shining pate; and Banks, less happy of countenance and cheerful of tone than he was twenty years ago.

I met the President, and liked his inscrutable face; I shouldn't like it, however, if I were to call on him for any favors. It is not the style of countenance that an office-seeker might hunger after. I sauntered graciously through the Red-room, the Blue-room, and the great East-room, and felt, like any other true-born American citizen, that I was monarch of all I surveyed, till I sat down in a red-plush chair, and was politely requested by the usher to vacate my comfortable seat.

My time was limited. I had promised to be home on a certain day, if possible.

"To-night," said I, one morning at the breakfast-table, "I must be on my winding way."

My pretty hostess (all Washington hostesses are pretty, they say) looked up with an incredulous expression.

"Going to leave us without visiting Mount Vernon?" she exclaimed. "Why, nobody thinks of doing so. You must certainly see the grave of Washington."

I turned to my brother-tourist, a smooth, sedate young man, after the most elaborate and ministerial pattern.

"Can we spare one more day?" I asked.

He took three sips of coffee and another mouthful of toast while deliberating, and then replied that he thought we might venture. He didn't see as it would make the difference of more than a few hours; there might never be another chance; a boat went down every day; the sail was a pleasant one, and the fare reasonable.

"I'll put you up a nice lunch," said our pretty hostess, "and you'll never be sorry if you go, I can promise you. The grounds are lovely; and then the dear old house—I do so dote on those famous old houses—those classic shades like *Modat Vernon*!"

I looked at my watch; we had just thirty minutes in which to reach the boat. Could it be done?

It was done. We two, with lunch carefully packed in a very small basket, found ourselves on a wee boat called the *Arrow*, which was preparing to be shot off, and making a prodigious noise in the operation.

The captain was good-natured and portly—all portly men are good-natured; I am portly.

Presently we were off, passing the Arsenal, with its fine grounds and fresh greensward, and many other places exceedingly beautiful in scenery. With serene sunshine and a delicious breeze, the sail promised to be delightful, and we were nearly the only passengers for Mount Vernon.

There were two remarkable negroes on board; one of them played the banjo, the other sang a pleasing little melody, the refrain of which was:

"Oh, when I was single,
My pockets did jingle,
I wish I was single again, again."

They amused us very much, particularly as after each exhibition of their remarkable powers they handed us a hat—not of the latest fashion—into which we were expected to put something.

The first time I deposited ten cents in this unique receptacle; my friend did likewise. The second time, grown wiser, I reduced my contribution one-half; the third time I gave my only remaining penny; the fourth time I looked the man sternly in the face and dropped in a button, and he took the hint. The fifth time he didn't come.

We longed eagerly for the first glimpse of the classic shades, and were sure we caught it just fifty-five times. It was two hours before we neared the point of interest, owing to the stubbornness of the tide.

Then, at the boat's shrill whistle, we understood that, at last, we had reached the home of Washington. Our hearts beat high with enthusiasm; we were so bubbling over with delight that we forgot to ask what should be the sign of our return, but settled between ourselves that we should find out somehow. We always do find out somehow, I have noticed on other occasions.

From the boat we walked up a sort of shaded lane. The moss, in beautiful varieties of green and yellow, lined the banks. The grass was thick under our feet, and the shadows few. The road was ridgy with recent rains, but on either hand the verdant carpet of Nature, prettier every way than Brussels, or Axminster, or velvet tapestry, was starred with the brightest wild-flowers.

"Washington has walked this same path," said my companion, reverently.

"Unless it has been opened since his death," said I.

"At all events we are nearing the house and grounds. It will not require any stretch of imagination to fancy that his footsteps have hallowed them," was the reply.

A narrow, winding path presented itself. The fair estate laid mapped out before us, giving glimpses of paradisiacal openings, brightened by pretty views of the glistening Potomac.

"Here," I said, as we reached a small enclosure, "must be the grave wherein the sacred dust is laid.—Remove your hat, my friend; here the greatest and best of his kind sleeps in a few feet of common earth!"

Poetic apostrophes rose to my lips; the tears were in my eyes. I felt inclined to kneel, at least on one knee, but happily curbed the pious inclination. I say happily, for at that moment a little red-coated yellow boy, with a mouth that transgressed all the lines of beauty, sauntered idly toward us, munching a green apple.

"My little lad," asked I, conscious that often the very occupants of hallowed shades are not familiar with the whereabouts of famous localities—"my little lad, what place is this?"

"Isus," repeated he, going at the apple again.

"What does he say?" queried my companion; "it sounds like Greek."

I repeated my question, and suddenly felt like putting my face in my hat.

"Old isus," he said again, breathing hard in his efforts to answer and swallow the apple at the same time.

"Oh—ah—I see," responded my friend, "this is the old *ice-house* at which we have been doing homage;" and suddenly the classic shades echoed and reëchoed with our laughter.

The little boy paused agast, stopped munching, and looked as if he were going to run away. He hitched his small trousers, and stood on one foot like a contemplative chicken.

"My boy, where is the tomb of Washington?" I asked, as soon as I could command the gravity essential to the subject.

"Up sher, massa, take da' dar road;" and he pointed to an opposite path, and calmly finished his apple.

Another moment, and we stood by the veritable tomb. We did not need to school our exuberance now; we felt that we were gazing on the ashes of the mighty dead, and were solemn. With what power the recollection of the wonder-working events of the past came over us! We spoke in whispers. Far as the eye could reach from this eminence, Nature in her loveliest forms and colors appealed to our hearts. Here he lived, walked, talked, planned; in that little white mansion yonder he breathed his last, and was carried forth, never more to return. And here before us, in the simplicity of a republican tomb, he slept. No armed guards to protect it from sacrilege; no splendid monument to proclaim that here rested all that was mortal of the greatest man of his age—the Father of his Country.

My friend ventured to remark that it looked rubbishy round the place. It did. There were bones and fragments, and stones and litter. I suspect they don't have many servants to keep the classic shades in order.

We went to the house, were admitted, saw the Lafayette mantel-piece, the wicked-looking key of the Bastille, the old, jangling harpsichord, the queer little parlors, the quaint frescos, the wide staircase, the sacred room in which he died—all these we carefully inspected.

While enjoying the beautiful view from the cupola, we heard a whistle.

"It can't be possible that's the signal to go?" quoth I.

"Of course not," was the reply; "we've only been here half an hour. Besides, they blow two whistles always."

I possessed my soul in patience at this, and we went on and out with our sight-seeing. We found numerous relics—at least we chose to call them so—and diligently labelled them:

A feather or two belonged to a lineal descendant of Father Washington's most venerable rooster. An antiquated oyster-shell, found in the interstices of one of the barns, might have been opened to furnish a bivalve for the great man's palate. My friend dug up a jack-knife, that appeared to have been buried a hundred years. It was at once made to do duty as George Washington's pocket-knife, the one he cut the cherry-tree with.

After I had carefully labelled it, my friend gravely suggested that I had better find a hatchet for that purpose, as it was never chronicled that the good boy used a knife on that occasion.

It was only a momentary forgetfulness on my part, so I erased all but the first line of the inscription.

We cut the bark (small pieces of it) from his favorite tree; we parloined a few flowers from his stately little garden; we dug moss from his banks; we ate our frugal lunch surrounded by some dozen hens and chickens, who fought for the crumbs; we parried the nose-thrust of an elderly goat, who had probably been petted by visitors till he had become an impertinent graybeard.

Suddenly it occurred to me that we had heard no second whistle. Possibly the steamer might be still at the wharf. We hurried down. Nothing in sight except a crazy boat and three or four scantily-clothed colored young boys fishing. Of them we queried about the Arrow.

"Been gone two hours," said one.

"But when will the other boat be here?"

"There's no odder boat to-night, mas'r; to-morrow at four the Arrow'll be back."

We bit our lips, and looked at each other in blank consternation.

To-morrow! Indeed, to-day we should have started on our journey home. The classic shades for a moment lost all their beauty, and seemed exceedingly blank and commonplace.

"What are we to do?" asked my friend, "which 'is name is Frank," as Mrs. Brown would say.

I shook my head. We toiled back to the house. The relics began to be troublesome.

A night-black darkey sat half-asleep on the porch. We succeeded in rousing him.

"Where is the gentleman of the house?" I asked.

"Dunno, sir," was the reply. "P'raps you means Mas'r W—— in de office."

He led us to the office. "Mas'r W——" was there, with the proper official aspect, and a pen behind his ear. He appeared to be reading, but the moment he saw us his pen was in his hand, and his keen eye seemed to say:

"Contribution, sir?"

Frank was spokesman.

"Mr. W——, we are left," he said. "Not knowing the regulations of the boat, we failed to obey her signal. What shall we do?"

"Well, really," said Mr. W——, "really I don't know."

"Is there no way of getting off?"

"Only by the boat, sir."

"Are there no teams to be had?"

"Not in this place. And, I regret to say, no accommodations for travellers."

"We must get off," said Frank.

"I wish I could help you," said Mr. W——. "Ah, I might send for Uncle Ned," he exclaimed, after a reflective pause; "he has a couple of mules, but it would be useless for you to attempt to go to-night; there will be no moon, and Uncle Ned is very careful of his mules."

I wondered, even in that trying moment, if Uncle Ned was a relative of that much-sung uncle who "had no wool on the top of his head," but did not venture to put the question.

Presently Uncle Ned made his appearance—a gigantic negro, though old and bowed, with the head of a philosopher, and the eye of a hawk.

"Well, gen'lmen," he said, when I had stated the circumstances, "I ken tote ye down to-morrow airly for a 'slderation. I's got two

dretfel good beasts—they's beauties, they is, and they'll kerry you quiet."

"What will that consideration be?" asked Frank.

"Well," he said, twirling his rimless hat, and surveying his patched overcoat, "I reckon I ken do it fer ten dollars."

I suppressed an "Oh!"

Frank suppressed one, too; I could see it in his face.

Mr. W—— toyed with his pen, and his eyes twinkled. I suspect that he had been taken in himself, and rather enjoyed our being done for.

I had only five dollars with me, and Frank had but little over that sum. We had compared notes previous to starting.

"So that is your price," said I; and any one would have imagined me the possessor of a well-packed pocket-book.

"Das de price, boss," said the old man, straightening himself a little; "you see it's a long an' a hard road to trabble, an' I couldn't take two gen'lem for no less, no sort o' way, shuah."

"Very well; but where are we to stay to-night?" I asked.

"Well, das anoder qeshon, mas'r," replied the negro, with one or two awkward jerks. "Ain't no tavern anywheres hereabouts—sartin ob dat, sir."

"I don't see but we must sleep somewhere—perhaps there's a barn on the premises," said I.

Mr. W—— was busy pulling at a scant mustache. Suddenly the old negro put out one foot, stroked the side of his nose, and eyed us askance.

"Dar's Aunt Sally," he exclaimed.

"Who is Aunt Sally?"

"Mighty nice ole 'ooman, sir. She's got a cabin wid a room over-top. She'll fix ye, gen'lem."

"For a consideration, I suppose?" said Frank.

"Yes, boss," Uncle Ned rejoined, "I'll make dat all right. Won't ask ye no more, seein' yees rale gen'lems; so, if ye pleases, I'll show yo' whar Aunt Sally lives."

The old scamp knew that he had charged us five dollars too much, but was evidently charmed that we had not beat him down one-half.

In the course of an hour we were sitting in Aunt Sally's cabin, eating pone-cake. The little place was as clean and neat as hands could make it. Aunt Sally herself, high-turbaned, tall, and consequential, moved about with unsurpassed dignity. After we were better acquainted, her fat sides shook more than once at our poor jokes.

By an uncertain ladder we gained our room. It was pitch-dark, but Aunt Sally handed us a tallow-dip that enabled us to make a survey of the premises. A low, comfortable bed, spread with white, took up half the room; a little table stood by its side, topped by a ragged and well-thumbed Bible; a chair did duty as a wash-stand; and by the window we dimly perceived a bowl and pitcher.

We slept sweetly that night, anxious as we were, in our novel quarters. Aunt Sally called us up early, gave us fried bacon and corn-cake, with "lasses" in a brown cream-jug, and, at seven precisely, came Uncle Ned with his mules.

I have often thought since that the ride was worth the money, aside from Uncle Ned's entertaining conversation. The old man told us that he was eighty-nine.

"Born on de place, gen'lem," he said; "seen de ole gen'ral more times 'an you could count, I reckon. Mighty good mas'r he war, too; slaves all loved him. Ky! dey set up a howlin' when he died, I reckon. All down de place dar was lights an' fires burnin', and dem what didn't sing war cryin', an' dem as wasn't cryin' war prayin', an' 'twas jus' as 'twas when de Lord was taken, I reckon."

This the old man said with a solemn face.

The roads were very passable, some of them perfect bowers, where the trees met over our heads, spreading a net-work of quivering light beneath. Many a picture we saw on that eventful morning as Uncle Ned pointed out places made historical by the "late onpleasantness."

One ancient thatch-covered mill we passed, about which lounged several strapping negroes, each with his white bag waiting for the meal to be ground. The great beams were cool and dripping, painted with that inimitable hair-like delicacy of green and amber made by layers of almost impalpable moss; the sound of the water trickling from the wheels caused my nerves to tingle with boyish pleasure. Here and there were stretches of field and hill such as no painter's

skill could rival, and everywhere the irrepressible Virginia fence kept us company.

At last we reached Alexandria, and parted with our Uncle Edward, after transferring two crisp paper pictures to his homespun pockets.

Arrived home, we found our pretty hostess in an alarming state of mind, she having conjectured all possible mishaps, but, producing our relics, she soon relapsed into her usual state of smiling complacency, and to this day has, in a conspicuous place in her cabinet, the old jack-knife that we had labelled with so much care.

BERNARD'S INVENTION.

I.

TWELVE o'clock.

Not midnight, but bright, soft noonday—the noonday of lovely April—in the old-fashioned garden of an old-fashioned house, located in the very midst of the business portion of the large and flourishing town of W—. It had once been a very elegant residence, this old house, and had stood on the outskirts of the town, with pleasant hills and valleys, waving woods and green fields, sweeping up to the very verge of the garden. But now, all around it, flowed a busy tide of trade; warehouses of cotton and tobacco rose on either side; wagons and drays rattled past unceasingly; in the rear, a car-shop belched forth black smoke; while engines screamed, and trains rumbled heavily back and forth, at all hours of the night and day. Still, even amid these discordant surroundings, the old house held its own bravely, and, wrapping itself about with a mantle of dignified reserve, looked down with the pride of conscious antiquity upon all these new-comers of the later time. It had a right to do this, since its own recollections went back to the time when the Georges were kings, and when, at intervals, the red-men gathered strength to sweep down upon the dove-cots of their invaders. It was pointed out by the W—ites as the place where Cornwallis had established his headquarters, and where he and his courtly staff had once given a ball, and with the fair Tory ladies of the place danced a summer's night through. Life and death, and joy and sorrow, had each had its own time within its dark old walls; yet, still it stood—a memorial of the stately past, and, in some wise, a rebuke of the flippant present. It was not a pretty house, as beauty is reckoned now—nobody could for an instant compare it to the elegant villas which were scattered to the westward, and monopolized all that fair outlook of rolling country which had once been its own—neither was it a very comfortable house, according to modern ideas of comfort. But you rarely find, nowadays, such work as that of the panelled walls or richly-carved chimney-pieces, and there were nooks and corners about it, odd rooms stored away in all sorts of unaccountable places, and closets almost as large as rooms under the strange, dark, winding staircases, which gave it a charm that the most commodious and thoroughly-ventilated houses oftener lack than possess. Then, there was the back piazza, all latticed in and covered with green vines, until it had the seclusion, and more than the coolness, of a drawing-room. And beyond this piazza was the gem of the whole establishment—the old-fashioned garden; shut in from the outer world by a high wall, through which no one could peer, and over which no one could climb, occupying nearly a square, full of fruit-trees, fragrant with flowers, and abounding in shrubs that half a century before had been trimmed into the formal regularity of art, but had now overgrown every thing with the wild luxuriance of Nature.

It was in this garden that the flickering April sunlight marked twelve o'clock on a sundial that occupied the middle of a green plat, round the borders of which bright-hued flowers of the spring were blooming, while just in front of it was an arbor, draped all over with that fragrant darling of the Carolina woods, the yellow jasmine. Within this arbor—framed, as it were, by the green tendrils and golden bells—sat a young girl, busily engaged in drawing, at a small table. Seen under favorable circumstances, she might have been, and no doubt was, exceedingly pretty; but just now she looked pale and weary; her dress was careless; her hair was hastily pushed back, and gathered in a rough, loose knot behind; while her forehead was drawn into a frown that ill became its pearly whiteness. On the table before her lay open a case of mathematical-drawing instruments, and it was with these that she worked, tracing out intricate designs of an appar-

ently mechanical character on a large sheet of card-board, and now and then noting down certain numerical results on a sheet of paper near at hand. It was weary work, and when, at last, she glanced up, and saw that it was twelve o'clock, she threw down her pencil with an air of unmistakable relief.

"I must go and see about dinner," she said, half aloud; and, as she said it, she took up a large portfolio from the ground beside her chair, and began to put the drawing away. While she was thus occupied, a clear, fresh voice suddenly called, "Annie!" A quick, ringing step sounded on the gravel walk, and, round a group of shrubs that formed a perfect cloud of tinted bloom, a young man of the most frank and cheery presence imaginable came into sight. He was not particularly handsome, but he had a graceful, well-knit figure, and an open, pleasant face, while his whole manner diffused such an air of moral sunshine that it was no wonder the gloom parted and fled from the girl's brow at once.

"Louis!" she cried, eagerly; and then smiled, and added, in a tone of absurdly-weak reproof, "You provoking boy! how you startled me! What on earth brings you here at this hour of the day?"

"Kiss me, pretty one, and I'll tell you," said the new-comer, gayly. Then, having taken this favor, without incurring any rebuke thereby, he added, more gravely: "Annie, darling, congratulate me—my fortune is made! If your father agrees, we can be married this day two months."

"Oh!" said Annie, with a gasp; but the color came into her face, and made her absolutely lovely. "O Louis! how? what? Tell me what you mean—tell me all about it!"

The young man kissed her again. He was evidently glowing with triumph, and found it hard to contain his exultation within moderate bounds.

"I mean just what I say," he answered; "but, as for telling you all about it, I can't do that dearest, for I am bound to secrecy. I can only tell you this: my fortune—our fortune—is made, and you are mine."

"I was always that!" she cried, with something between a laugh and a sob. "But, surely, Louis, you can tell me a little more than this. If it is to be our fortune, surely, I have a right to know how it is made."

"Can't you trust me, Annie?"

"Trust you! Indeed, yes—ever and always. But, then, you know we are pledged not to keep any secrets from each other."

"Only such as honor demands; and this is a case of honor. However, I can tell you a little, the general outline of the matter. Here, let us sit down and talk at our leisure. Now—that is better. Well, to begin rather far from the point, and not so far either, you know I have always had a decided mechanical talent, and, thanks to your father's kindness, I have acquired some aptitude in turning it to account."

"Yes," said Annie, with a rueful glance at the portfolio; "yes, I know you have, and I know you will end by being as bad as he is, if you do not stop yourself in time."

"Stop myself!" repeated the young man, with a laugh. "Why, little simpleton, the science of mechanics is the lever of the world nowadays, and in all the world there is no better or more direct road to fortune than that which it opens. If we are married two months hence, it will be thanks to mechanics."

The girl's face fell a little; but she did not utter any thing, excepting the simple interrogative—

"How?"

"By means of a great invention," answered the young man, with color rising to his face, and light flashing in his eyes—"an invention which will be the greatest since steam, and which will go far to revolutionize the whole system of mechanics, as known to the world at present. I wish I could show it to you, Annie darling; I wish I could tell you.—But what is the matter? Why do you look at me as if—as if you were disappointed?"

"Because I am disappointed!" cried the girl; and before her lover knew what she was about, she had laid her head down on the table and was sobbing bitterly. Poor things! It was hard on both of them. Hard on the triumphant bearer of good news to see it so received. Harder still on the girl who had been so flushed with hope, to have it dashed by that word, to her, of fatal omen—"invention."

"I thought you meant something real—something to be relied

1871.]

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on," she sobbed. "O Louis, how could you disappoint me so cruelly! Oh, I am so sorry, so very sorry, that this fever—God knows I am almost tempted to call it this madness—has seized you, too! Louis, for Heaven's sake put it from you! Trust to the steady results of honest labor, and not to these wild schemes of a fortune to be made at one stroke. Look at my father! let him be a warning to you. See how his life has been spent in the service of this wretched science—how many inventions, that were to benefit the world, he has made—and where and how he is to-day! Oh, I had so hoped that with you I should be free from this weary toil that comes to nothing, this eager counting on dreams that are shadowy as air! And now—Louis, Louis, you will break my heart!"

"Dear love, I hope not," said Louis, half concerned, half amused. "You don't appreciate your father, Annie. You don't know what a

it is, so sad! And to think that you have started on the same path!"

"I have only made a beginning, dear, and as for my being a great inventor, you may set your mind at rest on that point. Nature did not favor me with the rare gift of original conception. I can only work out other men's thoughts, and sometimes bring them to a practical issue. This is all that I have done now. A gentleman, a friend of mine—I cannot tell you his name, because he desires that it may be kept secret—conceived a new idea in mechanics, but, lacking practical knowledge of the science, he could not work it out in practical form. So he brought a rough draught of the invention to me, and told me that, if I could perfect it, I might take out the patent, and share half the profits. I saw, at once, what a magnificent thing it would be if it could be perfected; so I fell into the idea forthwith, and went to work.



"Annie, congratulate me—my fortune is made."

great man he is—what a great man he yet will be in the face of that world which has treated him as from the beginning it has always treated genius—has robbed him, and laughed at him, and refused to hear him! But it will hear him yet. There never was a great mind that did not have to pass through this ordeal! there never was a great discovery that was not met by this opposition; there never was a great achievement that did not have to triumph over these difficulties. It has been hard on you, my poor pet; but I hope the hardest is over at last. Apart from my good fortune, your father tells me that he is working on an invention, which he thinks the greatest he has ever made, and the patent-right of which he does not mean to put out of his own hands."

"Yes, he is working at it," said the girl, wearily, and once more she glanced at the portfolio. "I have been making out some of the drawings," she added; "but he forbade me to show them, even to you. He has been robbed so often, that he has grown very suspicious now. Sometimes, I think he is reluctant to trust even me. O Louis,

Oh, Annie, how I worked! I saw fortune and you before me, and I never drew rein night or day. But, after a while, the inventor's fever came over me, and the fascination of the science overtook me. Then I forgot all about fortune, I even forgot all about you, and worked on and on, only that I might reach the result which seemed ever before me and yet ever eluding me. It eluded me for a long time, and no one but an inventor can imagine the fever in which I lived during that time. Waking or sleeping, I thought of nothing else—saw nothing else; and when, at last, one day the solution of my difficulties came to me like a flash of inspiration, I shouted until my neighbors thought that I was mad. I wanted, then, to throw down pencil and paper and rush to you; but Mr. —, I mean the original inventor, held me bound to absolute secrecy, and he did not relax this requirement even when all the specifications were made out and forwarded to the Patent Office. It was not until this morning, when he came and told me that the patent was finally issued, that he also told me I might announce the fact to my friends, provided I didn't divulge his name.

Heaven only knows why he should wish to give me all the credit, as well as half the profits; but one thing is certain, my darling—our fortune is made, and you are mine!"

He caught the girl in his arms at the last words, and kissed her again and again, while she could only lay her head down on his shoulder and indulge in an hysterical combination of laughter and tears.

"I am happy, Louis, and grateful—oh, so grateful!" she said, as well as the laughter and tears aforesaid would allow; "but, dear love, I should be still more happy, still more grateful, if the fortune had come to you in any other way. It seems to me like gambling—like something that means prosperity for a little while, but ruin in the end. I may be very foolish, but that is the way it seems to me, and then—O Louis, I feel sure that, in some way or other, it will bring us ill-luck!"

Louis smiled at this; but he did not attempt any thing like reason in reply. On the contrary, he changed the subject, and asked the foreboding girl if her father was at home. "I did not see him as I came through the house," he said; "and I am on thorns until I tell him my good luck, and hear him assure me that I may take you as soon as I please."

"He is not likely to give you that assurance to-day," said she, nodding archly.

"Is he not? Well, let us go and see."

They went accordingly, sauntering side by side down the garden-paths bordered with rows of tall box, and enlivened here and there by fragrant lilacs and sweet purple wisteria, until they reached the latticed piazza. From this they entered a narrow, dark passage, made still darker from the fact of the front door being closed, and thence passed into a room that resembled an amateur machine-shop more than any thing else. Mathematical and mechanical designs lined the walls; models, in miniature, of all machines, in connection with which steam has ever been used as a motive power, occupied every available space—excepting that which was filled by a large, locked cabinet—and in the midst of this apparent disorder stood a table, littered over with paper and drawing-materials. Annie looked round the apartment and shook her head.

"Papa is not here," she said. "You must remain on thorns a little longer, Louis."

"May he not be in the house somewhere?"

"No, he has gone out. Don't you see his hat is missing? He has gone to the machine-shops, I am sure. He often goes there for what he calls 'practical suggestions.' Come, let us sit in the piazza. This room is so dark and cold, that it makes me shiver."

II.

Very much like the fortunes of the old house were the fortunes of the man who at present inhabited it. He was a gentleman of good descent, as his name—the noble Scottish name of Gordon—amply testified; and he had once possessed a more than moderate amount of wealth; but, having been blessed, or rather cursed, with the gift of invention, this wealth had melted away to satisfy the insatiate demands of scientific experiment, until little or none of it remained. After his fortune was gone, he soon exhausted the long-suffering patience of his friends. They were all practical, worldly-wise people, and, regarding him as a half-mad visionary, troubled themselves very little about the manner in which they expressed this opinion. Naturally enough, Mr. Gordon resented its expression, and, naturally also, a formal break was the result. Being a widower with only one child, he took this child, and the yet dearer children of his brain—his inventions—and went forth into the world to conquer fortune. Instead of conquering, however, he was speedily conquered. Men laughed at his inventions, and then stole them; patent-rights, of his own discoveries, were taken out before his eyes; and he fell a victim to the countless modes of swindle and legal robbery that, from first to last, lie in wait for the inventor, and siphon from him both the glory and the profit he has toiled to gain. After a time, he drifted to W—, and became an inmate of the rambling old house already described. Here he lived an eremite sort of existence, working with feverish energy at an invention, which was to revolutionize the whole system of mechanics, and make not one, but a dozen fortunes for himself. Here, also, he made the acquaintance of Louis Bernard, a young civil engineer of unusual promise and talent. Despite this promise and talent, however, the young man was poor as a church mouse. But, in Mr. Gordon's eyes, this fact was any thing but a disadvantage. He was so very

eccentric—so very crazy, his friends said—that he looked upon poverty somewhat in the light of a badge of merit; and, when he found that a love-affair was developing between his pretty Annie and young Bernard, instead of turning the penniless suitor out-of-doors, he told him that he might marry the maiden as soon as he could support her in a respectable manner. Encouraged in this way, the love-affair became an authorized engagement, and was of six-months' standing on that bright April morning when our story opened.

Now, while the two lovers sat on the trellised piazza, and with the glory of sunlight and fragrance of flowers around them, laid countless plans for their blissful future, Mr. Gordon, as his daughter had rightly surmised, was peering in and out among the machinery of the engine and car-shops, located near his house. These car-shops formed quite a large establishment, for the railroad, to which they belonged, was very flourishing, and it was here that most of its rolling-stock was constructed. Consequently, the latest improvements in machinery were always to be found here, and consequently, also, it was a great resort of Mr. Gordon's. The employes knew him well, and, although they considered him a little "touched," liked him amazingly. The authorities, however, looked at him askance, and it was only the master-machinist who ever went out of his way to do him a kindness, or show him a civility.

This man, though only thirty-five, ranked high in his calling, and had entire control of the works. His name was Liddell; he was gentlemanly, though not a gentleman, and had for some time assiduously cultivated Mr. Gordon's acquaintance. To accomplish this was not difficult, since there was that best possible foundation for acquaintanceship, a common taste, between them. But the most natural things frequently excite gossip in a country-town; and unscrupulous news-mongers did not hesitate to say that the bright eyes of Annie Gordon possessed more attraction to the master-machinist than did her father's discourses on cog-wheels and piston-rods. However that might be, Mr. Liddell was one of the few visitors who ever crossed the threshold of the old house; and, in a quiet way, both father and daughter liked him cordially.

On this morning, as Mr. Gordon stood attentively regarding the action of a certain new-fangled cylinder, the master-machinist came out of his office and walked up to him.

"I am glad to see you, Mr. Gordon," said he, after the first salutations were exchanged, "to congratulate you on young Bernard's good luck. What a fortunate thing it is for him!—and I suppose I may congratulate Miss Annie, too."

Mr. Gordon looked up, and with his head full of the cylinder, did not understand the drift of this remark.

"Bernard's good luck!" he repeated. "I have not heard of any special luck of his. What has he fallen upon? A good position?"

"Something much better than a good position," answered Liddell, shrugging his shoulders. "I wonder you have not heard—everybody is full of it—he has made a fortune by a patent."

"A fortune!—by a patent!"

"A fortune undoubtedly, and by a patent. Why, I am astonished you don't know any thing about it. I supposed, of course, Bernard had been consulting you all this time. And in fact I thought—I felt sure—that you had a hand in the matter. The idea looks like you—at least I fancied as much."

"What is the idea?" asked Mr. Gordon, all in a fever, immediately. "The scamp has told me nothing whatever about it—very shabby of him, I think! I always knew he had sense, however—I always knew he would make his fortune sooner or later—only I did not look for it quite so soon! What is the idea, Mr. Liddell? Bless my soul!—to think of a patent!"

"The idea is something quite new, at least in machinery," said Liddell. "I don't know that I can explain it—I'm not a good hand at description—but if you'll step into my office I can show you a design that Bernard made out to show me what it was, and how it worked. That fellow has a most capital head."

"Yes," said Mr. Gordon, assenting most sincerely about the head; but he hesitated, and evidently did not like to inspect the design. "If Bernard had wished me to see it—" he began, with some dignity, but Liddell interrupted him.

"My dear sir," he exclaimed with a laugh, "don't you see why Bernard said nothing to you about it? He was afraid the thing might not succeed, and he wanted to spring a success and not a failure upon you. No doubt he is at your house now, telling the good

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news to Miss Annie, and, meanwhile, where is the harm of taking a look at the design? The patent being all safe, anybody and everybody may see it."

"I suppose there is no harm," said Mr. Gordon; and, the temptation being too strong for his dignity to resist, he forsook the cylinder, and followed the machinist to his office.

This office was a small box, with a table, two chairs, and a desk, in it. Placing one of the chairs beside the table, for his visitor, Liddell opened the desk and busied himself in extracting a particular paper from a crowded pigeon-hole. After some trouble, this was accomplished, and then he unfolded and spread it out—a large sheet covered with India-ink designs—before the eyes of the eager inventor.

The latter rose and bent forward—trembling with excitement. Any thing that related to inventions or patents interested him deeply, but the present matter came home to him almost as if it had been one of his own. Bernard's invention! He was eager to see what the boy had managed to accomplish; so eager, indeed, that for a moment this very eagerness defeated its own object. The paper swam before his eyes, the diagrams danced to and fro, and he saw nothing. After a second, however, the mist cleared, and then, as his glance fell on the principal design, the idea showed itself clear and distinct. He saw it, caught it, suddenly gasped, and fell back into his chair almost fainting.

Liddell, who was looking at him, was seriously alarmed, for he thought he had at least a case of apoplexy on his hands. Seizing some water that chanced to be near by, he sprinkled it over the pallid face, and, snatching up a newspaper, fanned the swooning man vigorously, loosening his cravat at the same time. In a few minutes these remedies had their due effect. Mr. Gordon recovered himself, looked up, and finally spoke—with a strangely-pitiful quaver in his voice:

"Let me see it again. I—I must have been mistaken."

"My dear sir, what is the matter?" cried Liddell. "Is there any thing—"

"The design! the design!" interrupted the inventor, with feverish energy: "My God, man! don't talk to me when I am almost mad! Show it to me instantly!"

The tone was so peremptory that the other obeyed at once. He held it up, and Mr. Gordon leaned forward, examining it intently. He said nothing; but the naturally pale hue of his complexion grew almost ashy, and his hands clasped and unclasped themselves convulsively, while more than once his lips quivered as if with unspoken words. At last he motioned it away, and rising, without a syllable, tottered, rather than walked, to the door. By this time, however, Liddell had somewhat recovered from his first surprise, and thought it time to interfere, so he followed and caught his arm.

"Mr. Gordon, pray sit down," he said. "You are not fit to go out in this state. Take some water—try to compose yourself. Good Heavens, sir! what is the matter?"

"Nothing is the matter," said Mr. Gordon, faintly, but he sat down and took the water—indeed, it was a matter of necessity to do so. "Nothing is the matter," he repeated wearily; adding in a lower tone—"nothing—nothing but the old story."

"I hope you are not vexed with Bernard for not letting you know. I assure you—"

Something in the face before him stopped the machinist at this point. Involuntarily he ceased speaking, and said nothing, even when, after several minutes had elapsed, Mr. Gordon rose and silently left the office.

He walked down the street toward his own house like one stunned. The people who met him looked in his face, shrugged their shoulders, and said to each other, "The man grows more crazy every day." But when he reached home, when he opened and closed the front-door, crossed the passage and stood in his own room, this unreal quietude gave way. He looked round on the darlings of his heart, the mute children of his brain; he gazed pitifully at that jealously-locked cabinet, where the toil of so many weary months, of anxious days, and sleepless nights, was drawing to a successful issue; he glanced at the table where long lines of abstruse calculation met his eye; then, with one deep groan, he sank into a seat, buried his face from the light, and sat a picture of stricken desolation.

In this state his daughter found him, when she entered, followed by her lover. Her eyes were so dazzled by the bright sunshine, from which she had come, that for a moment she did not see the relaxed figure bent forward over the useless papers; but the next instant she

caught sight of it, and rushed forward, with her whole heart in her voice.

"Papa! what is the matter?"

Mr. Gordon raised his face, and the mere sight of it seemed to petrify her, for she stopped suddenly, and stood motionless. Never in all her life before had she seen a face so set and bloodless, and never had she met such a look as gleamed on her now from her father's eyes. "Papa!" she cried again, with a startled appeal in her voice—and as she paused Bernard spoke.

"Something has happened, Mr. Gordon! Something is the matter! What is it?" he said, hastily.

In a moment, as it were, the inventor was himself—indeed, more than himself. Few people who knew the abstracted devotee of science, the pale scholar whose mind was habitually absent from the earth he trod, would have recognized him in the man who faced around upon the speaker, his face glowing with passionate energy, and his eyes flashing with indignant fire.

"You ask me that!" he said. "You dare to enter my room, side by side with my daughter, and speak to me—to me whom you have so shamelessly betrayed? Your audacity almost equals your villany, and I have but one answer for you—leave my house!"

There is no exaggeration in saying that if a thunder-bolt from heaven had rent the solid walls asunder, neither Bernard nor Annie could have been more confounded than by this unexpected and unprecedented outbreak. "Oh, my poor father!" cried the girl, under her breath, for she thought that veritable madness had come at last; but the young man, after one gasp of astonishment, saw that there was nothing of insanity in the steady face fronting him, and, as well as he could command himself, answered:

"I don't understand this. I am so little conscious of having offended you, that I must ask you to be more explicit. What have I done? What do you mean by accusing me of villany—by saying that I have betrayed you?"

"Answer me one question," said the elder man, sternly. "Have you not patented an invention?"

"An invention!" Bernard started; then added more quietly, "I came this morning to tell you that I had done so."

"To tell me!" It is impossible for words to express the indignant scorn that was in those three words—"To tell me! Well, in return, I will tell you that you are a thief!"

"Papa!"

It was Annie's voice that rang through the room with this cry of indignant reproach, but, for a full minute, Bernard made neither sound nor movement. When those bitter words fell on his ear, he took one quick, unconscious step forward; but the next he remembered himself, and fell back. In the minute that followed, he fought a fierce fight for self-control, and gained the victory. When at last he spoke, the veins were standing out on his forehead like knotted cords, but his voice was steady and firm.

"I have only one reply to make, sir—substantiate the charge."

"That is easy enough to do, if you will be kind enough to describe the nature of your invention."

Coldly and concisely the young man complied with the request. He described the nature of the conception which he had worked out to a successful result, and briefly added the explanation which he had already made to Annie, a statement that the original invention was not his own, and an account of the difficulty he had encountered in bringing it to practical operation. Mr. Gordon heard him out, without interruption of any kind, and was silent for a moment. Then he said frigidly:

"Do you decline to give the name of the original inventor?"

"I have no option but to decline, so long as he chooses to hold me bound to secrecy."

"Is he likely to hold you bound to secrecy if your good name is at stake in the matter?"

The young man threw his head back haughtily.

"My good name is not likely to be at stake, sir, with any one who knows me."

"Is it not?" said the other, with a short, hard laugh. "Then it is only because men will believe your word in preference to that of the mad old inventor. Perhaps you counted upon this, however. If so, the calculation did you credit."

"Papa!"—Annie broke in, with a wail, "why do you say such cruel things? Louis does not understand them, and neither do I."

Speak plainly, for Heaven's sake! Tell him—tell me—of what you suspect him."

"I suspect him of nothing," said Mr. Gordon, sternly, "On his own evidence I convict him of basely stealing my invention, the invention at which I have labored so long—the invention which was dearer to me than you, my child of flesh and blood—and of patenting it for his own use, and in his own name."

"Papa!"

"Look at him," said the inventor, rising and pointing with an almost tragic gesture at the young man. "Look at him! Tell me if that is the face of an innocent man."

And in truth, at that moment, Bernard's face was scarcely that of an innocent man. The very nature of the accusation had stricken from him all means of defence, while its suddenness so completely overwhelmed him, that he stood in the centre of the floor, a pale, silent picture of what seemed detected guilt. Not so thought Annie, however. She gave one glance at his face, and then sprang to his side.

"Louis, Louis, dear love, don't take it so!" she cried. "He does not mean it! he will be sorry for it yet. Oh, it is cruel!" she exclaimed, turning round upon her father. "You outrage him, and you outrage me! Papa, papa, how can you—how could you?"

"Perhaps you had a share in it too," said the inventor, bitterly, as her voice broke down in tears. "I was a fool to trust you—to trust anybody. I might have known that treachery and robbery would be the end. With or without your connivance, he must have obtained the design from you."

"From me!" cried the girl, with a startled gasp—for she had not expected this. Then she turned to Bernard and held out her hand. "O Louis, see how little he is himself! see how little he means it! see how little you can resent a charge in which I am included!"

"I resent it only thus far," said Bernard, looking at Mr. Gordon. "I ask now, as I asked before, to hear the evidence on which I am condemned."

"You shall see it," answered the other, briefly. He went to the cabinet, unlocked the door, and took out a large portfolio. Bringing this to the table, he opened it, and bade the young man come forward. When he came, several designs were spread before him. He took them up, one by one, and examined them closely. This occupied some time, and after putting down the last one he still remained silent—his face deadly pale, and his eyes bent downward in deep thought. It was only when Mr. Gordon asked what he had to say, that he looked up and spoke.

"I have only to say this—that Fate is against me," he answered. "I cannot refute the evidence of these papers. I am, indeed, astounded at it. I can only assert my own innocence—and of course that assertion counts for nothing with you. I do not believe that the man who applied to me stole the invention; for, in the first place, he is a man of honor, and, in the second place, he had no opportunity to do so. Therefore, I can only believe that it has been a strange coincidence of thought. God knows how much I regret having had any part in it; but of one thing you may be sure—until of your own accord you retract the accusation made this day, I will never touch one cent of the profits. I have not much hope of such a thing—but the truth may come to light some day. Until then, sir, I return you many thanks for your past kindness, and bid you good-by. Of course, you know that I shall not enter your doors again. Annie—darling—"

His voice broke down here; but he held out his hands, and in a moment Annie came to him with a rush. She was weeping bitterly, and in the midst of their parting embrace only two or three words were exchanged. "Don't forget me!" sobbed the girl. "Trust me!" whispered the young man, and that was all. Then they tore themselves apart, and Bernard went hastily out. When the heavy front-door closed upon him, a bitter pang shot through his heart. He was dreadfully conscious that it was for the last time.

[CONCLUSION NEXT WEEK.]

SOAP AND PERFUMERY.

THE use of soap does not go back of three hundred years. Gentlefolk of the middle ages concealed absence of cleanliness by the use of scents. The luxurious Greeks saturated their garments with

essences. Fuller's-earth was the only detergent that supplied the toilet of an Egyptian princess. Esther prepared herself to go in to King Ahasuerus with "oil of myrrh and sweet odors." The Hebrew word *borith*, translated "soap" in our authorized version of Jeremiah and Malachi, means alkali. For her bath in the river, Nausicaa was fortified, writes Homer, "with life-elevating food and refreshing wines, oil for anointing and perfumes to sweeten." The utter impossibility of thoroughly cleansing the skin by the use of water alone makes the immoderate use of scents by the ancients intelligible. In no other way than the absence of soap can the constant reference made by the poets and historians of Greece and the farther East to perfumes and oils, whenever bathing is in question, be satisfactorily accounted for.

In the washing of garments and household effects, stearite, or soap-stone, joined to other agents, shortly to be mentioned, seems to have been generally employed. This is a silicate of magnesia, white or purple in color, resembling talc in composition, of a fatty feel, cold to the touch, slightly soluble in water, largely distributed over the earth's surface, and generally known. Thoroughly-cleansing power it has not. It forms, with water, no chemical compound. Moving easily over surfaces, it serves, in a mechanical way, to partially extract spots from clothes and furniture. Plants with saponaceous juices (*struthium*) became also detergents. Solutions of soda and potash were known. Strabo speaks of an alkaline water in Armenia, which was used for washing clothes. Natron, a native sesquicarbonate of soda—a salt called *trona* by mineralogists—mingled with lye made from the ashes of wood, was the accepted agent in temples for cleansing oil and wine jars, and purifying images of the gods. Putrid lotium, however, was the universal solvent of dirt. The cleansing qualities of this complex salt appear to have been known from the beginning of the world. In the North-African states, in Persia, and parts of Russia, it is in extensive use at the present time for cleansing garments. The famous *blanchisseries* near Paris make it a constant element in the intricacies of their unequalled laundry-work. Woollen-manufactories create of it an article of extensive commerce. It is the agent of the Jews in Petticoat Lane, the soiled gatherings of the "old-clo' men" all over England for the stalls of Rag Fair being renovated by its use. No wonder that the fullers in ancient Rome, in whose business it was the only detergent, were in proverbial bad odor, nor that municipal edicts banished their trade out of town.

Soap-boiling, or the making of soft-soap for domestic use, cannot be traced back of the seventeenth century. Its discovery hardly antedates the reign of the first James of England. It is not a pleasant aspect presented of the gentles and nobles of heroic days, this absence of soap from boudoir and bath. It is none the less true, however, that neither Isabella of Valois nor Joanna of Navarre, Margaret of Anjou nor Elizabeth Woodville, Catharine of Aragon nor Anne Boleyn, nor even the beautiful Jane Seymour, nor unfortunate Mary Stuart, knew the luxury of soap in the toilet. Extracts and perfumes, cosmetics and powders, unguents for the hair and *poudres de senteur* for the complexion, they used in abundance. But the one indispensable detergent of modern life—that for which every other auxiliary to womanly attractions and manly self-respect would be sacrificed—they had not. Soap, in either solid or saponaceous form, comprised no part of the mysteries of ladies' boudoirs. The simple union of the lye of ashes with the fat of animals is a discovery so modern as to excite utmost wonder.

There is no greater stride in modern progress than that from domestic soap-boiling of the seventeenth century to soap-manufacture of the nineteenth. The researches of Chevreul were perhaps the starting-point. His successors smoothed the way. Sir Humphrey Davy showed a goal beyond, and the great and good Faraday, whose loss to the scientific world it seems impossible to repair, removed all obstacles to the attainment of what his predecessors only foresaw. On the other hand, in practical results, the world owes most in this branch of industry to James Muspratt. Soap-makers, at the beginning of this century, depended upon barilla and kelp. The supply was limited. In unfavorable seasons it was uncertain. Prices rose and fell. The successful manufacturers of one year were bankrupt the next. But, when Muspratt, adopting Leblanc's idea, began to prepare soda from sea-salt (*chloride of sodium*), every doubt about sufficiency of the raw material was removed. At first, the soap-manufacturers did not see it. They refused to use the new product. Muspratt, certain of ultimate success, began to give away the product of his works. For nearly three years he pushed forward a losing busi-

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ness. Ten thousand tons of soda were disbursed without charge to soap-boilers before they were convinced of the advantages it gave them. "It is a long lane," says the proverb, "that has no turning." The change came. Time and money are invincible arguments. At the beginning of his fourth year, Mr. Muspratt not only ceased giving, but was obliged almost to cease selling. Orders for soda poured in like a torrent. He could not supply one ton in a hundred. Increase of manufacturing power, economy of labor by new inventions, and restless work by night and day, failed to keep supply adequate to demand; and only by the substitution of iron in place of wooden carts, so that the soda, *red-hot*, could be discharged from his mills, was he able even measurably to satisfy his customers. For a time, a constant race was kept up between soap-making and the production of soda. The stimulus at last equalized results, and it is a fact worth noting that, within ten years of Mr. Muspratt's start, the single seaport of Liverpool exported more soap annually than all the seaports of Great Britain had ever done before.

In connection with this marvellous increase of soda and soap, there grew up an important secondary product—*hypochloride of lime* (bleaching-powder), which is largely used in all branches of chemical trades. In fact, soap occupies perhaps the most important page in the history of applied chemistry. It has opened channels to commerce, discovered new raw materials for its own production, and thus become the means as well as the mark of civilization. Almost simultaneously with employment of soda came the oils of the palm and cocoa-nut. They were at once introduced into the manufacture of soaps. From 1820 to 1868, the annual importation of palm-oil into England grew from seventeen thousand four hundred and fifty-six hundred-weights to nine hundred and thirty-seven thousand and fifty-four hundred-weights.

Perfumery, unlike soap, is of ancient origin. Layard's "Assyrian Sculptures" depict perfumes burning before the conqueror. On the walls of Egyptian temples the censor smokes before the presiding deity. Spices scented the sacrifices; sweet odors ascended from alabaster vases at feasts; and drugs of strong perfume performed a principal part in embalming the bodies of the dead. Moses prepared perfumes for the persons of the priests and offerings on the Golden Altar. The spouse in Canticles delights in spikenard and cinnamon, aloes and myrrh. Ezekiel accuses the Levites of defrauding the altar of its scented offerings, in order to give grateful odors to their garments; and Mary, at the house of Simon the leper, broke the alabaster-box of spikenard, very precious, and poured its contents on the head of Jesus.

Of the use of perfumes by the Greeks and Romans, historical accounts are copious. Pliny devotes pages of his works to the method of preparing perfume-drugs, their uses, salubrity, and cost. Seneca describes the lavish application of oils and powders, the employment of essences three times a day by the luxurious and wealthy, and the costly *narthecia* in which scents were taken to the baths. Strabo writes of the trade to the Orient, how the demand for perfume-drugs caused ships to plough the Red Sea and camels to plod the desert, and how Syria and Greece owed their growth as markets to the same cause, as well as the rock-encircled Petra its vitality. Southern Italy ministered, by the preparation of curious compounds, to the voluptuous taste. *Unguentarii* filled the great street of Capua with their workshops. Catania received raw materials, and shipped the manufactured products to every open port of the West; and Palermo, in Sicily, by discovery of a new perfume, grew up from a struggling hamlet to a large commercial town. In short, whether to regale the gods in sacrificing, or themselves in feasting—to conceal personal smells, or to attract by agreeable scents—the consumption of perfumes among the ancients far exceeded their use in modern times.

Modern science divides perfumes into four classes:

CLASS FIRST consists of gums and resins. They are obtained either by collecting the natural exudation of many tropical trees, or by tapping their trunks and drawing off the sap. The oldest of known perfumes are in most extensive use all over the world. Myrrh, camphor, olibanum, benzoin, gums employed in incense, and resins used in pastels, make up this class of perfumes.

CLASS SECOND comprises perfumes obtained by distillation. The art of distilling runs back into the distant ages. The most ancient archives of China describe the process. Buddha of the Hindoos was himself a distiller. Barbarous nations of Central Asia inherit knowledge of distillation from the earliest times. It does not appear to

have been applied to extract perfumes until a later day. But, as the Greeks learned the use of the still, imported by them from Egypt, they adapted it to the separation of the odorous principle from the numerous fragrance-bearing plants indigenous to the Pireus. Rome followed. Southern Italy, over whose slopes and sun-warmed valleys aromatic flowers bloomed in every season of the year, enlarged the process; and in its extension Naples and the Sicilies became what they are at the present time—the great producers of the ottos or quintessences of commerce. To this day, the essential oil of Neroli, produced from orange-flowers, and named from Nero, during whose reign it was discovered, is distilled only in the delicious climate of Sessara. New processes have never quite superseded the distillation of essential oils. The old method, while more expensive, produces most perfect results. Still all essential oils are slightly soluble in water, and, though those extracted in Italy are most retentive, they, with others, when brought into contact, give out the rose-water, orange-water, elder-water, and citron-water of commerce.

CLASS THIRD comprises perfumes proper for the handkerchief. The scent is comparatively new. For two hundred years, indeed, from the province of Var, in France, a peculiar species of essences has found sale in the markets. No one seems to have looked into their origin. Climate was supposed to give the peculiar odor. Attempts to imitate them were failures. They possessed a living fragrance which all decoctions refused to yield. It has been lately ascertained that the principle and process which produce these perfumes are new. The odors of flowers do not exist as in a gland; they are a living exhalation. While the plant lives, they develop, day by day, in its flowers. When it dies, they give what they contain, but produce no more. Acting upon this great fact, which perfume-producers had never discovered, the peasantry of Var cultivated their plants, and gathered only their flowers. Vast fields of roses, oranges, acacias, violets, jasmines, and jonquils, were tilled simply for the blooms they yielded, never for sprays or leaves, branches or stems. At flowering-time, the population is busy gathering, day by day, the constantly-renewing product. It has been long known that grease attracts and holds the scent of flowers. By *enfleurage*, then, as the Varians term it—that is, by laying flowers upon sheets of glass over which layers of grease are spread—the perfume of each kind is caught and retained. The work goes on through the season. Manufacturers purchase the flower-leaves at fixed rates. Glass plates, covered with fresh oleaginous coats, are in readiness for every day's gathering. Departments for each kind of aroma are separate from all others. The grease, once impregnated, is removed, put into jars, and new laminae spread upon the glass plate. The process is continued to the end of the season. Alcohol is then poured into the jars, allowed to remain until it absorbs the scents from the grease, emptied into cans fitted for exportation, and then shipped for the Parisian market. The grease, retaining only its oleaginous properties and smell, is used for other purposes. There are other processes by which perfumes for the handkerchief are produced. That of *eau-de-cologne* is one, of *clematis* another, maceration a third; but they are too well known to be enumerated here.

CLASS FOURTH includes all scents of animal origin. Among these, musk is the first in commercial importance. The value of its imports into England, in 1868, was more than fifteen thousand pounds. Its qualities are universally known. The subtle nature it possesses pervades every thing. A polished-steel surface will hold the odor of musk for years. Ambergis, the favorite perfume of the court of Louis XIV., and which saintly George Herbert names in "The Odour"—

"How sweetly doth MY MASTER sound! MY MASTER!
As ambergis leaves a rich scent
Unto the taster.
So do these words a sweet content,
An Oriental fragrant—MY MASTER!"—

has nearly gone out of use. Only two hundred and twenty-five ounces were imported last year into Great Britain, valued at two hundred and twenty-five pounds. It is soluble in alcohol, is chiefly composed of a peculiar animal substance called *adipocire*, possesses an agreeable odor, and is used in compounding lavender-water. Civet, also, has lost its once great reputation. Civet-cats used to be purchased by the drug-dealers of Holland at twenty pounds each. Pure civet sold, during the reign of Elizabeth, at a price as high as sixty shillings (equivalent to seventy dollars now) an ounce. The medical virtues

attributed to it bordered on the marvellous. But, both as medicine and perfume, it has been laid aside. Shakespeare's fop might ask at every druggist's shop in Broadway, "Give me an ounce of civet, good apothecary, to sweeten my imagination," without the slightest prospect of success. It must be still used for some purposes, however, since three hundred and fifty-five ounces were imported into London in 1868, at a valuation of three hundred and ten pounds sterling. Hartshorn (ammonia), on the contrary, included in class four, is in constantly-increasing demand.

Essential oils, under the name of ottoes, are still a large article of traffic. In 1867, three hundred thousand pounds of these oils were imported into England, at a valuation of two hundred and seventy thousand pounds. To produce this large result, musk figures at above ten thousand five hundred pounds; otto of roses, at thirteen thousand seven hundred and fifty pounds; vanilla, at twelve thousand five hundred and sixty pounds; and thirty-seven other essential oils make up the sum total.

In conclusion, let us notice one of the extraordinary discoveries of modern chemistry. To produce perfumes, neither gums nor flowers, earthy deposits nor animal secretions, are necessary. Scents of roses; aromas of jonquills; perfumes of vanilla; and odors of violets, acacias, and jasmines, are now obtained from substances associated only with disgusting smells. Fetid fusil-oil, cast away for many centuries as the most repulsive of chemical products, has become a principal agent in the modern manufacture of pear, peach, cherry, green-gage, strawberry, and orange oils. Butyric acid, formed by rancid butter and decomposed cheese, yields the most perfect essential oil of bitter almonds. Treated in a different manner, it gives pineapple-oil. And from the drainage of cow-stables are obtained the essential ingredients in the popular perfume of *eau de mille fleurs*.

N. S. DODGE.

THE PHILOSOPHY OF BORROWING.

"Neither a borrower nor a lender be,
For loan oft loses both itself and friend,
And borrowing dulls the edge of husbandry."

THIS was the advice Polonius gave Laertes on the eve of his first start in life. Excellent advice; but impracticable, as society is constituted. Why, bless the dear old man, what was he thinking about? Borrowing is as old as lying; they are, in fact, correlatives. If a man is neither to be a borrower nor a lender, what is he to be, we should like to know? Society is divided into two great classes—borrowers and lenders! It is in beautiful natural harmony. Every needy soul finds a kindly and genial soul possessing that surplus which shall minister to the needy one's wants. The rich man is only Nature's treasurer; he but holds in trust that surplus, riches—call it what you will—with which he can relieve his poorer brethren. It is like positive and negative electricity—*plus* and *minus*; when there is too much *plus*, then there comes a social thunder-storm, as exhibited in periodical commercial crashes. This might have been avoided if the poorer brethren—the borrowers—had been permitted to draw off the surplus electricity—riches—in "sparks"—that is, in loan—there would have been no shock. As M. Proudhon remarked, "It was never intended that one man should hold the property of thousands, unless as a trustee to advance it as required." A rightly-constituted man can never feel more happy than when honoring one of these sentimental checks. The pleasantest part of the transaction consists in the little fiction about repayment. Nobody is deceived. The lender never expects to be repaid, and the borrower never intends that he should be! But it enables both parties to retain their self-respect.

Perhaps the oldest authentic case of borrowing was the case of the Israelites, who borrowed from the Egyptians—and never repaid them. Julius Cæsar was a great proficient in the art; his debts considerably exceeded five million dollars. The Plantagenets, Tudors, and Stuarts, were terrible borrowers. King John extracted loans from the Jews by the ingenious process of extracting their teeth! One tooth *per diem* (without chloroform or laughing-gas) until the loan was effected! One obdurate Israelite is stated to have endured the drawing of half his teeth before he would make up his mind to draw a check. This ill-conditioned individual was thus mulcted both in money and teeth. Moral—Never show your teeth when asked for a loan. Edward I. had a terrible plan for borrowing from the Jews.

It was a system of forced loans. He cruelly tortured the wretched Hebrews until they yielded up their hoards. If they grumbled, he either put them to death or banished them from the kingdom. Fancy the British Chancellor of the Exchequer nowadays negotiating a loan with Baron Rothschild by means of an earnest appeal to that gentleman's teeth! History calls Edward I. a great king. We consider him to have been a cruel and rapacious tyrant, who not only robbed and tortured the Jews, but barbarously murdered the Welsh bards. But Jews or poets were not held of much account in those iron ages.

That tipsy Solomon—James I.—was a mean borrower. He is said, on one occasion, to have borrowed a pair of silk stockings from one of his nobles; he had not even the manhood to borrow a dozen pairs. Charles I. borrowed on a truly regal scale. The loans, or "benevolences," were forced out of the unfortunate landholders by fine and imprisonment. Charles II. borrowed from everybody. He not only borrowed his people's money, but their wives and daughters; he borrowed from the King of France. He was the falsest, meanest, and meretricious reprobate who ever lived an infidel and died a Roman Catholic. Charles II. also instituted the national debt of Great Britain, but it was William III. to whom the nation was indebted for the regular establishment of that noble British institution: also for the introduction of the cat-o'-nine-tails. William was a great prince, but inordinately fond of green peas. He is said to have invariably consumed the first dish of that agreeable vegetable without sparing his poor queen even a spoonful. Great men have their little failings. During the reign of George III. the nation took to borrowing from itself at a frightful rate. The wicked and absurd war with France added more than two billion dollars to the national debt. Some English people admire this beautiful institution as a great blessing provided by the wisdom of their ancestors, and mysteriously connected with the national prosperity. We wish them joy of their taste. George IV., who possessed all the vices of Charles II., with the addition of a few special ones of his own, borrowed shamelessly from everybody who would lend him a shilling. We need scarcely add that he never paid anybody. In fact, the only debt he ever *did* pay was that of Nature; and he could not well escape that. The clothes, wigs, etc., of this great and good prince are said to have cost the nation fifty thousand dollars per annum! The population of a large village might have been fed for a smaller sum. The coronation of "Georgius" cost over one million two hundred and fifteen thousand dollars. We forget the cost of his funeral, but the nation did not grudge that!

To turn from these magnificent borrowers of millions to the humble borrowers of dimes seems pitiful, but is necessary to enable us to trace the ramifications of the art. Some men seem to be born borrowers. Their clothes and schooling are borrowed; at least they are never paid for. They borrow bats, balls, and marbles; they borrow cents; by-and-by they borrow dollars; until, after a life spent in borrowing, they go hopelessly to the bad, borrow a razor, and—are buried in a borrowed—that is, a charity—coffin. Some men spend their lives in borrowing books, and, if they are industrious, collect at last quite a library. Other men have a mania for borrowing umbrellas. Poor Douglas Jerrold had a capital story on the subject: Jones borrowed Brown's umbrella. One wet morning Brown meets Jones comfortably protected by the borrowed article. "Hah! Jones, how lucky—my umbrella. I'm wet through." "You can't have it," says dry Jones, "I want it myself." "But what am I to do?" gasps Brown. "Do!" retorts Jones, "why, do as I did, you fool—borrow one."

Some men are always borrowing their friends' names—on the backs of bills. It is facetiously termed "getting up behind." It is very easy to "get up," but a very different matter to "get down," and generally involves a tumble. There are, positively, men in New-York City, who, like our imported sparrows, do not know in the morning where their daily crumbs are coming from. They trust to borrowing; yet how light, airy, and unembarrassed is the demeanor of a man of this class! Nature tells Braas that he has not breakfasted. Hah! how fortunate: yonder comes Allworthy, a kind, warm-hearted man, born to lend. A request for the loan of a five-dollar bill is instantly preferred. (Braas never borrows *less* than a "five"—he says it's mean.) Allworthy hesitates, for he has bled on more than one occasion; but he is a man who has all his life labored under a difficulty about saying no in the right place. Sadly, but with resignation, he places the desiderated stamp in the other's outstretched palm. 'Tis done; and Allworthy enjoys the satisfaction of knowing that his friend's wants are provided for. Not, however, for long, for there is

not much spending in borrowed money. Men of Brass's class have a partiality for salmon, turkey, spring lamb, and green peas; agreeable viands, but running into money.

A very numerous class borrow other people's ideas, inventions, even jokes, and thrive upon the larceny. The reader will perceive that we consider thieving and borrowing, without any intention of repaying, as convertible terms. It does not speak favorably for the morality of English playwrights, that more than one-half the farces and sensational dramas are borrowed from the French. We never heard of the French borrowing from the English. There are certain folks who flaunt in borrowed plumes. Mrs. Grenadine, for instance, is going out shopping, and borrows Mrs. Shoddy's carriage, laboring apparently under the delusion that people will take it for her own, and that she will receive homage and "kotou" in consequence. Error! Mr. Stewart's salesman, with one discerning glance at the coachman, perceives the true state of the case. Coachmen do not like being "loaned," and have a quiet but unmistakable manner of showing that the "party" they are attending upon is not their own mistress. Then there are the people in the middle rank of life, who, whenever they give a party, make a point of borrowing articles of plate wherewith to adorn the table. Mrs. Spannew expects a few friends; the affair must be quite "genteel" (odious word), so she borrows Mrs. Tiptopper's "épergne," and Mrs. Flash's silver cake-basket and electro-candelabra, Mrs. Scupp's handsome presentation salver, and other articles of *virtu*. She also borrows a waiter—not a dumb one—but a hired one, a dreadful man in shabby black, a limp, white neckcloth, and white Berlin gloves, who yawns fearfully during the repast (poor fellow! he has been up three nights running), and the guests have the satisfaction of pretending to gaze with the eyes of strangers on their own belongings, and of complimenting Mrs. Spannew on the handsome appearance of her table! Then these unfortunate people quaff cheap champagne with fearful inward misgivings, to be too surely realized on the morrow.

Give not, dear reader, your autograph to the children of Israel! Avoid the professional money-lender as you would the east-wind. Beware of the money-lender, for his ways tend unto bankruptcy. Borrow money only on the direst necessity. If you borrow of a friend, do it with the firm and steady resolution of honestly repaying him—sooner or later. We remember a funny story of an unfortunate borrower, who in his penitential moments used to abuse his image in the looking-glass. "You horrid dolt, you wretched fool, you drivelling jack-anape; don't shake your stupid fist at me. I've a great mind to knock your ugly head off your foolish shoulders, yaha! you ought to be ashamed of yourself!" The man felt humiliated. Indeed, a borrower, in presence of his creditor feels but half a man. How can you argue the point with a man to whom you owe money, without a sort of horrid fear that, if you get the best of it, he will retort with "By-the-by, you owe me fifty dollars!" You seem to see "fifty dollars" gleaming in his teeth, twinkling in his eye, and radiating from his whiskers. A man who borrows money is a man on crutches, he is artificially supported; he is not a man—only a poor cripple. Therefore we say, if possible, borrow not at all. A shored-up house is an unsightly object, dangerous to its inmates; and shunned by the passers-by.

LÉON GAMBETTA.

IT is not only true, as the trite saying hath it, that great occasions call forth great men to cope with them; it is also true that such occasions often cast into a sudden obscurity those who have hitherto been the leading spirits of a nation or party, and who make way for those who are younger and less known.

When Napoleon III. laid his sword "at the feet of your Majesty," after Sedan, every one felt that his reign and imperial government in France were at an end. For the moment, every eye turned toward Paris. What would be the next phase in French politics? Would the Orleanists, the Bourbonists, or the republicans, prevail in the sudden crisis? Almost every tongue predicted a revolution; and forthwith, on the heels of the easy prophecy, a revolution ensued. Then, the wisacre who did not foresee a republic was shallow indeed. But, revolution triumphant, the republic a fact, who would rule this not only revolutionary and republican, but invaded and beleaguered, France? Here the prophets had a wider range of probabilities to encounter, greater uncertainty to venture on. Yet, the answer seemed

thereon forthcoming. On the very morrow after the news of the new republic was flashed by wire and cable to the four continents, behold a flock of refugees—illustrious and obscure, voluntary and involuntary exiles—hastening breathless to their beloved Paris. Victor Hugo, patriarchal and visionary; Ledru-Rollin, with his imposing presence, and the old leonine vehemence; Esquiros, with his black, fine face; Blanqui, still Jacobin and leveller; little Louis Blanc, calm, philosophic, with his bold, dark eye, and his somewhat softened socialism—these, arrived in Paris, seemed to proffer an abundance of brains, experience, and democratic zeal, to seize the helm in this tempestuous storm. But each and all of them were a day too late. In the Chamber itself, there were republicans who held the advantage of presence, had the nerve to seize the chance, and took the flood when at its instantaneous height. Jules Favre proposed and carried the motion to depose the emperor and to abolish the empire. LÉON GAMBETTA proposed and carried the motion to establish the republic.

There were, perhaps, fifty or sixty republicans in this last of the imperial legislatures. Among them, too, were old and tried veterans of the old republic. There were Garnier-Pagès, Raspail, Glais-Bizoin, and Crémieux, members of the provisional government of 1848; there were Jules Favre, Jules Simon, Eugène Pelletan, Bancel, of a younger generation, but who had long fought the empire to its face, and had carried the republican standard through many a fierce and stubborn conflict with the ministers of arbitrary power, and immense majorities of hot partisans of imperialism. Yet, not even to any of these devoted and well-tried champions was it given to achieve the place of command in the new state. A younger, less known, and probably greater man than either came to the front, assumed the authority, and at once reaped the honors and bore the burden of accomplishing the long-delayed result. Gambetta not only carried the vote to establish the republic in the terrified and moribund Chamber; he proclaimed the republic to the frenzied thousands who crowded the Quai d'Orsay from the steps of the Palais Bourbon; he organized the republic in that historic hall in the Hôtel de Ville, where were yet marks of the revolutionary bullets of '89, and from whose balcony Lamartine had braved death in rejecting the red flag and raising aloft the grand old tricolor of liberated France. The new provisional government met there—Favre, Simon, Glais-Bizoin, Crémieux, Garnier-Pagès, Rochefort, Gambetta—all but the last two famous republicans of the 1848 and imperial eras. They were all a constellation of subordinate satellites around the central planet, Gambetta; and next to him in power and activity was his young colleague, Rochefort.

What really proves Gambetta's greatness is, not that he obtained power, but that he has kept it, and that he has, as far as we can judge, wielded it to great, though it may be not successful, purpose. At the very first, he summoned order out of chaos, and government out of insurrection. Revolution in France has a bad name; yet this revolution—accomplished in the midst of exasperation and disgrace, of terrible uncertainties and impending dangers, when the eagles of France were debased on the battle-field, the soldiers of France slaughtered, the generals of France imbeciles or traitors—this revolution was bloodless. That howling and bitter mob was swayed and calmed by Gambetta. We must not forget, too, that the hair-brained fanatic Rochefort (as he had been called, not a month before, by an imperialist parasite) came stoutly to the rescue of order, and did his share in appeasing the giant wrath of a betrayed people, bent on swift and indiscriminate revenge. A good day's work was done on that, the birthday of the new republic. Gambetta, as Minister of the Interior, and practically minister of war, prime minister, "chief of the state," too, saw that he must compress the work of weeks into hours. The enemy already was preparing to march on Paris. Whole armies had been swept from the field as prisoners of war. The remainder of the regular forces of France were bewildered and scattered. The hope of succor from without died—if it had not died before—when the republic rose out of the ruins of the empire. The *préfectures* and *mairies*, throughout the land, were yet held by imperialist partisans. Red republicanism surged and swelled in the metropolis. In Lyons, Marseilles, and Bordeaux, the rise of the republic inspired the fanatics, who thought it meant Jacobinism and the guillotine. Indeed, the new dictator, so far as he was known at all, was known as a fanatic—as a rabid fire-eater, involved in plots and conspiracies, who had spoken with a seemingly unbridled tongue when his voice had reached the public ear. He had been one of the "uncompromisers" of the new Chamber, and there had led where the old republicans durst not fol-

low. Raspail alone, stout old chemist, philosopher, agitator, and democrat, supported Gambetta when he defended the absent and imprisoned Rochefort, and proudly demanded his release.

Whence came he, this seemingly rabid radical, who appeared to dream of Utopias, and to insist on their possible immediate realization? Four years ago, Léon Gambetta was a respectable, not at all famous, advocate, thought to be a rather rising young man at the Paris bar. Among the republicans in the metropolis he was recognized as a man and a brother, who appeared not seldom at their private conferences, and was always very zealous, though by no means a frequent speaker, or given to much talking—silently earnest and intense rather than a shout of the oft-repeated French republican platitudes. He was, further, looked on as a young man of good morals and correct conduct, not given to debauchery, hard-studying in his law-books, seldom seen in social circles. He was, in 1867, growing fast, evidently, in the estimation of his republican brethren; for we find him mentioned, once or twice in that year, as junior counsel on certain political cases, with his present colleague, Jules Favre, as his senior.

It happened in the autumn of 1867 that a new device was imagined by the agitators of Paris to propagate their political creed, and further their designs against imperialism. It was proposed, amid great excitement, to celebrate the anniversary of the martyrdom of Baudin. Baudin, it may not be forgotten, was the deputy who was killed at the first barricade erected in the Faubourg St.-Antoine to resist the *coup d'état*, December 3, 1851. He was standing on one of the carriages which formed the barricade, and was haranguing the soldiers to dissuade them from firing on its defenders, when he fell, struck in the head by three bullets. So slain, Baudin was henceforth enshrined by the republican enemies of the empire as one of their martyrs and one of its victims. In 1867, a subscription had been projected and raised by the republican press in Paris, to erect a monument over Baudin's grave in Père la Chaise, which was marked by no sculptured memorial of where he lay. This idea suggested the other—to make a demonstration on the anniversary of his death. The day came, and the demonstration was made. Crowds of *ouvriers* and students, not unattended by citizens of repute and standing, made their way in the morning to Père la Chaise. It was a bright, clear December morning. The people carried with them wreaths of *immortelles*, with which they strewed the modest grave. There were, however, gendarmes there in force. They grimly lined the walks, and stood in groups at the corners of the avenues. This irritated the mob; for a gendarme acts on a Paris republican as a red shawl on a mad bull. Mutterings were heard. Seditious cries broke out. The emperor was consigned to a locality rather worse than oblivion, and long life was wished "the republic." At this the gendarmes stood not on the order of their action, but acted at once, and—somewhat indiscriminately. They plunged pell-mell upon the people, and here and there effected arrests—some seventy or eighty being dragged out of the "city of the dead," and lodged in the Conciergerie and at Mazas. The trial of these accused traitors—the supposed shouters of the seditious cries—came on soon after. Their advocate was to be Jules Favre. There was intense excitement as to the issue of the trials. The eyes of all France were fixed upon the court; the newspapers were full of the affair; it was pretty shrewdly guessed that the government was resolved to make an example of these men, whether innocent or guilty.

Very shortly before the cases came on, Jules Favre found that unforeseen circumstances would prevent his appearance for the defence. The expense of the defence would be defrayed by the private republican committees. An advocate must be at once selected, both competent and on the spot. Léon Gambetta was chosen; and the opportunity gave him fame and fortune by a single effort. The cause was one in which he had ample scope for his ability as an advocate and his zeal as a republican. He used both to splendid purpose. The court was crowded. The evidence against the accused was meagre and indistinct. The issue in the trial itself was comparatively of secondary importance. The eloquence of the young advocate startled the palace, and inspired his partisans. His impetuous torrent at times so overwhelmed the parasite judges of the empire that they neglected to check and reprove him. Instead of confining himself to the defence, he in turn became the accuser, arraigned the empire as the culprit, and brought so crushing an indictment against its follies and its crimes that the *procureur* sat speechless, and the audience broke into

enthusiastic and irrepressible applause. It was the greatest forensic triumph seen in that court for many a day.

By it Gambetta at once took rank, at the Paris bar, among the most eminent advocates; at the same time he won a place in the admiration of the Paris republicans which was shortly to serve him in a wonderful and unexpected way. It transpired that Gambetta, like Thiers, Rouget de l'Isle, Ollivier, and so many other illustrious Frenchmen, was born at Marseilles, and that he was then thirty-two years old, having first seen the light in 1835. He was of Italian parentage; a fact betrayed no less in his rather sallow and ultramontane physiognomy than in his name. His family were of the respectable middle class; his lineage was commonplace—not noble, like that of Louis Blanc; nor plebeian, like that of Thiers. He was well educated at the *lycées* of his native town, and studied law, partly at Marseilles and partly in Paris. Some two years since he made his first appearance as an advocate in the Paris courts. He was an attentive, not a deep student, fond of history, poetry, and politics, yet attached to his profession. Such were the meagre facts ascertained of him when, in the spring of 1869, a general election for the Corps Législatif was ordered to take place by imperial decree.

The republicans in the last Chamber but one had numbered only five—called "Les Cinq"—who consented to take the oath of allegiance in order to attack the empire. In the now moribund Chamber the number of republicans was not far from thirty. This Chamber had been elected in 1863; six years of agitation, of active propaganda, had passed; the empire had blundered in Mexico, about Luxembourg, and in remaining neutral in the Austro-Prussian War. The republicans, therefore, hoped with good reason to largely increase their number of deputies. The emperor had been forced to extend the liberties of the press and to grant the right of meeting; and this at once proved to the republicans how encouraging were their prospects, and gave them new opportunities to strengthen their cause. The elections of May, 1869, are still remembered for their turbulence and agitation. In Paris the republican candidates were all men of mark, and were, excepting in one district—that represented by Thiers—certain of being elected. Gambetta was a candidate both in Paris and in Marseilles. Both constituencies, by large majorities, chose him. Every large city, excepting Lille and Nantes, went decisively for the republicans. Their number in the new Chamber was—of republicans, certain and reliable, about seventy; of liberals, who might be reckoned on in vital questions to vote with the republicans, about thirty—total, one hundred. Gambetta, for the reason that his Paris constituency was more certain in a second trial to elect another republican, chose to sit for Marseilles. Glais-Bizoin (if I mistake not), who had been thrown out by his Breton constituency, was chosen in Paris in his place.

The empire was even then rocking on its foundations. The meagre reforms of 1868 had not improved its security. The "third-party" ministry of Emile Ollivier had not worked its promised wonders. The old Rouher and Fleury influence at the court was still suspected to be uppermost. The imperialist majority had so woefully dwindled that it was doubtful whether it was really a majority or not; for the old friends of the emperor, such as Garnier de Cassagnac—*les Arcadiens*—bitterly opposed the new ministers. Ollivier was timid and halting, the opposition were vehement and aggressive. Thus stood matters when the session opened in June.

But the opposition, though energetic, was still divided. The republicans, in particular, differed in the manner of their action, though they had a common object. Most of the "left" seemed indisposed to an immediate and sustained warfare à l'outrance against the government. There was even talk that, under certain concessions, some of them might possibly go over and join the ministry. Two Orleanists, Daru and Buffet, were already in the cabinet. It was now that Gambetta displayed that will and courage, that uncompromising, radical, and open pursuit of his object, which have characterized his later and greater exploits. Flanked by Rochefort and Raspail, the Ulysses and the Nestor of his party, he opened declared war on the empire. Of course, he was a fanatic, a visionary radical, a Utopian; but in this sort of crisis such men lead, and prevail. The promise given by his bond in plea was more than fulfilled by his oratorical efforts in the Chamber. It was impossible to sneer at this earnest and eloquent man, who found no time for polished irony or well-turned periods. Rochefort's imprudences laid him open to ridicule; no one thought of laughing at Gambetta. His physical appearance, though not impos-

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ing, gave indications of rare intellectual endowments, and his face, when lit up by the excitements of debate, shone as if by true genius. Of moderate height, well-built, and a little inclining to corpulency; his eyes dark brown and deep, one a little disfigured, but not enough to be remarked unless one were close to him; a bold, strong, rather thick and large nose, distinctly Italian, even Italian-Jewish, in its shape; thinish, compressed, determined lips; a squarish face, with firmly-set jaws, the mouth and chin covered with a thick black beard; the forehead ample and round, slightly bald above; the black, stubby hair short and thick, excepting on the crown; a general expression, which seemed half-meditative, half-dreamy; rather placid than stern when in repose, as if quite self-convicted and self-reliant, but, when roused to the pitch of passionate, accusing declamation, the features mobile and agitated—so he appeared as he sat or spoke on that extreme left of the Chamber, with whose history he is now so notably identified. His voice was clear, round, and deep; his pronunciation, though often rapid, always distinct; his gestures few, but strong and most expressive. His constant attendance on the sessions; his perpetual vigilance; his keen perception of a weak point in the adversary's armor; his contempt of compromises or of parliamentary tact and prudence; the pertinacity with which he clung to his purpose—made him dreaded by the ministers more than any other deputy of the opposition. A parliamentary leader, under ordinary circumstances, he could not have been; Jules Favre would easily have kept the lead of the republicans in less stormy times. But Gambetta had never been in the traces of party discipline, and had no patience or time to submit to them now.

In the characteristics and temperament which I have described may be seen the reasons why, when the empire was defeated and the republic arose on its ruins, Gambetta should, without question, as it were naturally, assume the chief—indeed, the sole—authority. What wonders he has worked as virtual chief of the state are in a history too recent and too vivid to need recalling. That he has worked wonders, no one will question. By his energy new armies have been raised, equipped, and sent into the field. The departments have received new rulers of his appointment. Repeated revolts against the new authority have been subdued, oftener without than with bloodshed. Gambetta seems always to have been where the supreme power was most needed. Now at Tours, now at Lyons, now at Bordeaux, now at Le Mans, his spirit has infused itself wherever inspiration might, mayhap, effect something against the fearful supremacy of the invader. He has struggled mightily and well for the republic which he proclaimed, and to the maintenance of which he devoted every energy of his being. He has done ill-judged things, probably very imprudent things; has possibly been curt and arrogant to hoary generals, and has seemed to show at times but little regard for the truth. But his course, as he looks at it, is twofold. He would preserve his country from disintegration and dishonor. He would establish in it a government of liberty. Much may be excused to such a man with such a cause. At least he has not been arrogant in wickedness, nor untruthful in the service of despotism. He has been heroic, even if we refer to the plane of heroism which is simple perseverance and persistency in pursuing an end. The difficulties which he has had to encounter seem to us, at a distance, and hearing only rumors and snatches of the truth afar off, gigantic; on the spot they are doubtless far greater than we know. His name and fame have already passed into history. Probably he will do nothing in the future which will make his past career more illustrious.

GEORGE M. TOWLE.

OUR NATIONAL GAME.

IN a recent essay on Chaucer, James Russell Lowell makes practical common-sense the distinguishing mark of the Saxon as compared with the Celt. The same quality, he says, pervades their religious views. It is this practical element, we think, that has modified the hard Puritanism of the eighteenth and beginning of the nineteenth century, and permitted an element of amusement to exist contemporaneously with true piety. And within a certain limit health has followed in the train of amusement. But a few years since, the hollow-cheeked countenance, "sicklied o'er with the pale cast of thought," was considered the necessary accompaniment of the scholar and the clergyman; happy was that parish whose minister had studied him-

self into dyspepsia. The lad who came home from college with healthy face and sunny disposition was adjudged to have done injustice to his studies. Owing to base-ball, university-rowing, and our Saxon element of common-sense, all this has changed. The social element of the country, restrained at first by the smallness of our villages, the extent of our farms, and a severe religious training, is now developing itself. Yankees are naturally gregarious, and meet in crowds wherever the occasion gives zest and interest. We love sport and excitement, especially when the element of uncertainty is thrown in. Base-ball, restrained within proper limits, is healthy, pleasant, social, and uncertain. It has passed from city to town, from town to village, till it has overspread the nation. A thriving town in the West is now said to have one church, one school-house, and eight base-ball clubs. It is as much our national game as cricket is that of the English. Both are ball-games, played with almost the same number of players. But cricket is slow and unwieldy, more likely to do injury, more scientific in its nature, more certain in its result. Base-ball is quick in its evolutions and renewals, gives more opening to dash and energy, depends somewhat on luck, and thus gives more chance for betting. And so the slow, dangerous, scientific cricket is the national game of England, and base-ball the favorite play on this side the Atlantic. Our national characteristics develop themselves even in our amusements.

Base-ball is not the game of cultured society. It has none of the delicacy of touch, the companionship of the friend, the expensiveness of the materials that distinguish billiards. It is gregarious in its nature and delights in crowds. The ringing cheer that marks the good catch, the groan that follows the muffin play, the hearty sympathy of the multitude, are essential elements in its composition. Hence it is the great game of the middle class. Every city has its favorite club that travels leisurely over the country every summer, paying its way as it goes, by the gate-money of its admirers. It is the play of Young America; and in its gamy pursuit, a prodigious amount of pluck and muscle have been developed. Occasionally twisted fingers and broken noses are the penalties paid for prominence in ball-playing. But what are these among so many benefits that accrue to our young men from their enthusiastic love of this science. To every player and to most lookers-on, base-ball is its own exceeding high reward.

The development of this game within the last few years shows some remarkable statistics. But a little more than a quarter of a century has passed away since the organization of the first club. Prior to that period, Two-old-cat was the euphonious name of the juvenile predecessor of our present game; a name and game whose hoary antiquity goes back to a time whereof the memory of boys runneth not to the contrary. It was in 1846, that the first club was formed, whose immortality of existence has been transmitted to posterity; and, formed in the great city of Gotham, it was of course christened as the Knickerbocker. That club was the parental organization of the present game; its children may be reckoned by thousands in all parts of the country. A second club was soon started in the same city, known as the New-York Club; and the first match game on this continent was played between them on the 19th of June, 1846. For the next ten years the clubs were few, but not far between, being almost entirely confined to the vicinity of New York. In 1856 the Knickerbocker Club inaugurated a movement for a convention of base-ball players, and in March, 1857, sixteen clubs, seven having their home in New York and nine hailing from Brooklyn, and all the other clubs in the country being nowhere, met in convention. In March, 1858, a similar gathering was held, at which twenty-five clubs were represented; and to this meeting came one club from a distance of thirty miles—the Liberty, of New Brunswick. And then and there "The National Association of Base-ball Players" drew its first breath of life.

The first ten annual meetings of this association were held in New York. But the game had now become national, and other cities desired the honors of the session. And so the meetings became peripatetic, and the eleventh was held in Philadelphia, the twelfth at Washington, and the thirteenth and last at Boston.

The nomenclature of the different clubs generally betrays a local origin. No doubt can exist where the Harvards, the Yales, the Cincinnati, the Keystones, the Forest Cities, the Nationals, the Marylands, the Niagaras, the Atlantics, and the Pacifics, have their baptismal homes. The Buckskins live at Gloversville, the Buckeyes at Cincinnati, the Southerners at New Orleans, and the Omahas at Nebraska. The Kickenepawlings hail from Pennsylvania, and the Ki-

klongas from Indiana. The Unions may be found in every city. The Esculapian Club of Brooklyn is made up entirely of physicians; the ranks of the Manhattan in New York are recruited from the police force; the Malta Club of that city only admit milkmen. In short, every profession, every calling, as well as every considerable village in the country, has its base-ball club.

But the best base-ball clubs of the country—those that have won a national reputation—are no longer a collection of enthusiastic young men engaged in base-ball for the love of the game. That innocent stage has passed away. The leading players who really constitute the club—the picked nine—are professional players who join the club that gives them the highest salary. The rivalry of cities has degraded these clubs into collections of hired players, whose only interest is to win their pay by successful games. These Dugald Dalgettys of the profession enjoy salaries ranging from one thousand to twenty-five hundred dollars a year; and they draw those salaries with as much regularity as the salesman or the artisan. Every first-class player can now command a good living. All the best clubs of the country, the Red and White Stockings, the Atlantics, the Athletics, the Eckfords, the Haymakers, the Mutuals, are professional clubs; every player in them is hired. Emulous Chicago undertook last spring to form a club that should be superior to the Cincinnati; and prices immediately rose. The prospect for another year is that of a further rise; two of the best players in the country are understood to be engaged for the season of 1871 at salaries of three thousand dollars each for the eight months. These salaries are, of course, only given to pitchers, for on them, more than on any other, does the success of the club depend. A good pitcher is exceedingly rare; pitching is a grace born with the man, and not acquired by art. With an un-bent arm, held perpendicularly to the plane of the body, he is so swiftly to deliver the ball that the batsman shall be unable to detect the true line of its passage, and yet unable to decline it as a fair ball. Who will say that a person able to do this is not worthy of a salary greater than that of any university professor in our land! Is not the pitcher, too, a professor of muscular Christianity?

A well-located ground, level, grassy, and dry, is indispensable to a good game of base-ball. On its shady side should arise an amphitheatre of benches capable of seating three to five, and in our largest cities ten thousand spectators; for their sympathy and half-dollars are the great sources of inspiration. If there are trees contiguous to the field, they should be strong; for they will always have to bear a full crop of juveniles. The fence should be tight, and of that uniform height that riders-by cannot overlook. If knot-holes abound in the fence, they will come to a charitable use for those who cannot afford to pay. On one ground that we wot of, so highly civilized are the gamins of the neighborhood, that whoever first in spring writes his name over a knot-hole is entitled to its use all the games of the season! A well-located knot-hole is a source of profit as well as pride. It makes many an apple or penny change pockets during the season.

It is a prevalent opinion that the blind goddess of luck presides over most games; but this is a mistake. Good playing always tells; and luck will manifest itself as much on one side as the other. It was good playing that enabled the Red Stockings to win fifty-seven consecutive games in 1869. Their playing greatly varied. In the contest with the Buckeyes of their own city, the score stood 103 to 8; with the Mutuals of New York 4 to 2, and yet the same number of innings was played in both games. During 1869 the Red Stockings averaged 42 runs to a game; while their opponents, including the best clubs in the country, averaged only 10; no luck ever gave this superiority of four to one. Carelessness and muffin lose twenty games to one where luck predominates. If the number of runs indicated the superiority of the players, the Athletics of Philadelphia would be the champion club of the country; their playing in 1869 averaged more than 43 runs to a game. The Atlantics averaged 33, the Mutuals 31, and the Eckfords 28. The smallest score on record that year was that of a game played between the Atlantics and the Mutuals, when at the end of the sixth inning the score stood 2 to 1 in favor of the Atlantics. Two of the largest were made by the Athletics, standing 107 in one game, and 114 in the other. One of the largest scores on record was made by the Athletics in 1865, when they scored 162 in eight innings to 11 of the Alerts. This was the second game played that day by the Athletics, the forenoon having been spent in a friendly contest with the Williamsport Club, in which the Athletics made 101 to 8; 268 runs in one day! In the game in the afternoon, all the

bats of both clubs were broken, and in the last inning the handle of the nearest shovel was dignified into a bat.

It were an easy task to chronicle the causes of the national interest in base-ball; but one characteristic justifies its universal spread. More than any other game, it furnishes the solution of that important question, the extraction of the most health from a given quantity of amusement. "A healthy soul can only live in a healthy body," said the Greeks. *Mens sana in corpore sano* is so trite a Roman proverb that we hardly care to quote it. "By no other way," says Cicero, "can man approach nearer to the gods than by conferring health on men." And this divine gift is the very specialty of base-ball.

And not only is the game health-giving, but we point with pride to its moral influence. It is the conservative power of American society. While woman is soliciting office and demanding the franchise, base-ball clubs are only accessible to men. Whether this arises from that innate love of the graceful that would keep a woman from jumping loftily into air after a ball on the fly, or that catching in laps is forbidden by the rules of the game, or that the rapid running of the bases is inconsistent with the stability of chignons and water-falls, certain it is that there is no pressure on these clubs for the admission of the fair sex. Our female Canutes are told by the wave of base-ball now rolling over the land, "Thus far mayst thou go, and no farther."

WILLIAM R. HOOPER.

A MIDWINTER-DAY.

IT is more like the mid-day of some other season of the year, in this latitude of forty-two degrees, to-day. The air is soft and balmy; and the rich azure, which veils the whole landscape, lends the enchantment of Indian summer. This morning the sunrise filled our valley with unwonted splendor of purple and gold, and many of its rich tints still linger, as if loath to fade into garish day.

Where I am sitting—upon a mossy rock in the edge of a recent clearing of a thickly-wooded steep, where great fallen trunks of maple, chestnut, hickory, and chips of immaculate whiteness, are scattered all about me—I look over the soft, tufted brown of the meadows and hill-side-fields, from which the snow has suddenly vanished (save a faint line now and then, in a fence-shelter, like a swath of ripe grain), and over the woods to the distant mountain-range. A wood-chopper's axe, far off, beats time to my musings, like the ticking of a clock. There are faint sounds wafted hither from the little village down by the stream; and blithe chattering announces to the echoing hills that he has come forth with his admiring family to enjoy both the mellow day and whatever grubs may have the temerity to also accept the genial invitations of the weather. But his shrill voice reaches me in clear, inexpressible musical vibrations, a little fainter than the mingled voices of a throng of school-children, at their romping sports. The sound from them, too—wrangling, singing, shouting—is blended in a pleasant rhythm; and the yellow school-house, by the brook, at the meeting of the roads, at this distance has strikingly the appearance of a little beehive in swarming-time. Two youths are skating upon the narrow white path of the stream, which winds its bright serpentine coil through the sear meadows. Their crystal bridge, despite the summer-like atmosphere, is a foot in thickness; for it is less than a week ago that our mornings were scored *zero*. Even the ring of their skates reaches my ear faintly; but a sweet-silence pervades every thing near, save the softest murmur of content, which seems to throb under the gray leaves.

Is there any thing more beautiful—at least in winter-time—than a nook like this, canopied by hemlocks in the steep mountain-side, where the fantastically-piled rocks are all overgrown? The rank growth of summer no longer obscures and smothers this vegetation of mosses, ferns, and lichens. This is their summer. They are vivid with life, and luxuriate in an infinite variety of exquisite tints. What numberless shades of green, brown, red, yellow! Over the soft embroidered cushion of the mosses, the variegated ferns spread out their long fingers. The top of this ancient stump is a rare vase of lichens, and they fill every scar which the ruthless axe made so many years ago. Their tiny cups are brimming with scarlet drops. In such a spot as this, you are continually finding new forms of these cryptogamous plants, until you come to believe them altogether fantastic in

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the shapes they take to themselves—hoiding to no arbitrary mandate of species; they seem to you infinite in variety, if you forget that they are all labelled with long, unrememberable combinations of vowels and consonants in some scientific folio. But the botanist can do little else than bestow these names on them, for they manage, by means of a little impalpable brown dust, to each keep its family line, with every hereditary trait intact, without flower or seed his microscope can detect.

The top of this tall ash-sapling—whose smooth gray rind is wound with a spiral coil—is bright with clusters of bitter-sweet, which are more like flowers than berries, for the orange-colored shell is parted, and opens like a corolla around the crimson berry. I find upon the ground a few of the singular pods of the *staphylea*, or bladder-nut, and some are still rattling upon the shrub. They are some two inches long, with a small, shiny seed or two in each of the triple compartments, thus kept dry for good reasons, no doubt, against sprouting-time. The witch-hazel flowers still hang in a rather dishevelled condition. They had their time of golden blossoming in November, so as to get an early start next spring, but in fruitage they will still be behind the chestnut, which blooms in June and July. Here are some of the curiously-speckled berries of the Solomon's seal, and the intensely bright scarlet ones of the jack-in-a-pulpit, or Indian turnip. There are many beautiful leaves, which, by closely hugging the breast of Mother Earth, will retain their freshness through the severest winter. None are more beautiful than the thick, heart-shaped leaves of the hepatica, with the bright purple of their under-sides.

But there is no end of the treasures one may find, by searching, under this warm mantle which the trees have shed. On my homeward way, across the fallow fields, I go well laden with some of these. One cannot go far, in whatever field of this region, without stumbling upon the little hillock where some industrious woodchuck has excavated his habitation. There is always the interest, to me, of mystery about these subterranean dwellings. I should like, wondrous well, to peep in on the family in the unrestraint of their domestic life. What secret of good housekeeping might I not learn? There is no sign of life now about the dwelling of this one, dipping under a huge boulder, which I have just come upon. But the lord of the castle is within, I know. How snugly he lies there, long-nighted, short-dayed months! I fancy that, in the vital kernel of that inanimate ball of fur, which Audubon says he rolls himself into, he is all the while dreaming the sweetest of dreams—living in the rankest, blossomest, honeyest clover, fenced about with delightful tumbled-down stone-walls, in which to play *bopeep* with phantasmagorical bipeds, who can never hit him with their shadowy guns, and where the wicked dogs cease from troubling. On some unazure day of "blues" I should not mind curling snugly down beside him there, to share his happy reveries—safe from dismal daily newspapers, and all report of wonderful nineteenth-century enlightenments, and where telegrams could not be delivered. One would "dig out," in the spring, as fresh as Adam emerged from the dust of the earth into Eden, with all the ills that flesh is heir to sloughed off. To have one's little life rounded with such a sleep! Ah, the thrill of that April morning!—to stand at the mouth of the hole, where the winter had been so sweetly dreamed away, upon one's hind-legs—I mean upon the minimum of support our unfortunate species is limited to—and behold the new creation of the earth; the bare, brown hills, and the leafless trees aglow in the light of expectation!

But this is not a day which can bring such longings; they will come soon enough when the mercury drops again—a plummet into the heart of this blandly-smiling Winter. The reality of this opulent mid-winter-day stirs sweeter currents by far in the soul than the most blissful dreamings.

MYRON B. BENTON.

THE BOHON-UPAS-TREE.

DURING the cruise of the United States ship Plymouth in the East Indies she visited the coast of Borneo, and there spent some time in regulating our commercial interests. While lying off the mouth of Brunf River, upon which is situated the capital city of Borneo proper, a party was made up to visit a upas-tree, which it appears is occasionally found in other islands than Java.

With a boat's crew well armed we left the ship at daybreak, in

order to accomplish the distance (twenty-one miles) before the sun came out in full strength. Reaching the mouth of the river after a pull of an hour and a half we landed to eat our breakfast, and, after resting the crew, put off again, arriving at our place of destination about ten A. M. We were all looking out eagerly for the realization of one of the wonderful stories that so fascinated our boyhood; but here were no barren wastes, or arid, skeleton-covered plains.

Following our native guide-boat we sheered in alongside of a grassy bank, the summit of which was laid out in small plots like children's gardens at home, each plot surrounded by a border of shells, with carefully-kept walks between them. Nothing but grass and flowers were growing there, but these were most luxuriant; for this was a graveyard, and we were even then standing under the shadow of the terrible poison-tree, near which these people bury their dead, which may partially account for the wonderful stories told by early travellers. The tree itself measured eleven feet in circumference five feet above the ground, and, instead of scattering death and destruction, was girted round with creeping vines and many-colored parasites that wound their way to the topmost branches, which were higher than any of the surrounding trees, and equalled, if not surpassed, those of our loftiest forest-trees at home.

An incision was made, after the manner of tapping maple-trees, and the sap, which is reported to be a deadly poison, commenced flowing drop by drop. It was of a yellowish-white color, thick and glutinous, resembling in its general appearance good rich cream. There was no unpleasant odor perceptible from it, nor did any of us experience any disagreeable sensations, though standing near by while the sap was being discharged. This was so slow an operation that it required nearly an hour to fill a two-ounce phial. Meantime it was desirable to procure some of the leaves and branches, but these were beyond our reach, as the lowest branch was at least a hundred feet from the ground, and, although the men could easily have climbed up by the vines, the surgeon in charge of the party refused to let them make the attempt, fearing that their hands and feet might become poisoned. At last, having loaded all our carbines with ball, a particular limb was selected, and we fired together, by this means securing several fine specimens.

Having obtained matter enough of all kinds to satisfy the demands of science, we returned to the ship, arriving on board at two o'clock in the morning, highly gratified by the result of our visit to this great natural curiosity which had been one of the wonders and mysteries of our boyhood.

H. W. DODGE.

A CAVALIER TO HIS SWORD.

(SEVENTEENTH CENTURY.)

COME, kiss my gallant sword,
And sprinkle it with wine;
This night it won its lord
A joy and hope divine!

Oft in these gloomy days
That cloud our stormy isle,
It earned a leader's praise—
To-night a woman's smile!

Behind its point, secure
Oft life and honor lay—
To-night it guarded pure
A richer prize than they.

Once did the steadfast blade
Our monarch's bulwark prove—
To-night the steel was awayed
To serve the queen of love!

With myrtle and the rose
Entwine it for the stroke;
In them it brighter glows,
Than decked with bay or oak!

JOSEPH O'CONNOR.



CLEARING THE SURFACE OF THE ICE WITH SNOW-PLUGHS.

I C E :

ITS FORMATION, PECULIARITIES, AND USES—ITS COMMERCIAL VALUE AND IMPORTANCE—THE ICE-HARVEST, HOW GATHERED AND MARKITED.

"OBSERVE, my brethren," said a grave English clergyman, to his hearers, in one of his sermons, "what a wise dispensation of Providence it is that great rivers should always flow past great towns." In a similar spirit of profound philosophical reflection we may remark what a wise dispensation it is that ice should be solely or mainly a product of cold countries! If it were formed in the tropics, what quantities of it would be wasted, and how it would check the rapid growth of vegetation! There is, to be sure, sometimes a little superabundance of it in those Northern regions, where, from its commonness, it is not so highly prized as it should be; but the same thing is true of tropical products.

Our neighbors in Greenland, Iceland, and Nova Zembla (not to speak of Alaska, which is a part of our own homestead), are, we are sorry to say, sometimes inclined to complain of a superfluity of ice, when, from an unusually hard freeze, it exceeds twenty feet in thickness, and is too rough for sledging, and especially when, owing to the nights being dark, they cannot follow their favorite amusement of skating in a ring round the North Pole, or dance the German on the ice beneath the illuminations of the aurora borealis. It is, it must be confessed, a little awkward at times for our daring navigators in their ardent pursuit of whales to find themselves nipped between two vast ice-fields, and their vessels crushed like egg-shells, or to have a squadron of those grand old icebergs, two hundred and fifty or three hundred feet above the water, and at least two thousand feet below it, come sailing in among them, and paying not the slightest heed to the laws of the road. But, then, these things are good for the whales, and why should these whaling-ships persist in trying to catch the harmless monsters, when kerosene is so cheap and astral oil so widely advertised? It is evident that in this world the interests of classes must clash to some extent, and, if man has had his day, why should not the whale have his also, and enjoy the delights of his ice-clad home, undisturbed by harpoons, self-exploding bombs, or the other weapons of destruction, which have hitherto brought to light so much blubbering and spouting among these monsters of the deep? But it is ice, not whale-oil, that we undertook to write about.

Manifold are the uses of ice. It is an admirable thing to skate upon, when it is smooth, and there are no treacherous ice-glades or rotten ice to interfere with the sport. With the skilful skater skating is the very poetry of motion; the graceful curves, pirouettes, and intricate

figures, executed with such ease; the swift flight and pursuit; the evolutions by which the experienced skater avoids his pursuer, or, doubling on his track, becomes in his turn the pursuer—send a joyous thrill through the veins, and the man seems for a time changed into a winged creature, who can at will spurn this dull earth. If the skater be of the fair sex, and reasonably skilful in the art, her graceful motions and her well-arranged drapery add to the beautiful illusion, and she seems a swan skimming over the glassy surface, or a bird of paradise irradiating the scene with the brilliant yet harmonious tints of her plumage.

Ice is a grand antiseptic. On the banks of the Yenisei, the Obi, and the Lena, Siberian rivers, and the shores of the Frozen Sea, there have been found, within the last two hundred years, exhumed by exceptionally-protracted rains and thaws, great numbers of carcasses of the mastodon and other huge prehistoric beasts, which had been packed in ice probably many thousand years ago—what time those frightful beasts and beastesses, so vividly depicted in the Museum department of this journal, roamed the earth, and perhaps stored away for the prehistoric man to carve with his obsidian knives, chop with his stone hatchets, or crack their bones with his porphyry hammers; but alas, poor fellow! he failed of finding the contents of this grand refrigerator, and he and his wife and little ones were compelled to drag out a squalid existence on the meat of the wild-horse or the cave-bear.

The presence of so many of these huge creatures in a region so far north, denizens of a temperate if not a tropical climate—as from their habits they must have been—indicates with certainty the suddenness and completeness of some of those climatic changes which geologists describe, and which they attribute to a change in the inclinations of the earth to the plane of the ecliptic. The poor brutes must have been caught in a hard frost as they were disporting themselves in the stream—a frost so hard that they were fast locked in their icy bed, and, covered with the drift, borne down by the river-currents. Nor is this remarkable, if we believe the statements of Erman, the Russian traveller, who tells us that an attempt was made many years since to sink a well near the mouth of one of these rivers, and that the workmen employed found alternate layers of gravel and clear solid ice to the depth of five hundred and eighty-two feet, indicating that the internal fires had not made much progress in thawing out that part of the planet.

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Mankind are exceedingly stupid; whether they grow more or less so, as the ages roll on, is a mooted question. It would seem that, from this demonstration of the antiseptic and refrigerating power of

ice on so large a scale—for we are told that the flesh of these carcases was perfectly fresh, and was devoured by the Samoeds, as well as by wild and tame carnivorous animals, with great avidity—somebody would have taken the hint, within less than one hundred and fifty years, of the possibility of preserving meats for an indefinite period, either by the use of ice or by a low temperature produced by means of ice-packing; but it never seems to have occurred to anybody, from 1703, when the first of these carcases was discovered, to about

the middle of the present century, that there was a great, useful, and profitable lesson to be taught by this sudden uncovering of food thus preserved for ages. We know now, thanks to the enterprise of American inventors and discoverers, that it is not only possible but easy to transport carcases of beef, mutton, pork, and venison, killed on the plains of Texas, at the foot-hills of the Rocky Mountains, or on the Pacific slope, and much more in the States of the Mississippi Valley, in refrigerating cars or ships, where the temperature is reduced to 34° Fahrenheit or below, by means of ice-packing, to the Atlantic coast, or, for that matter, around the globe. The effort is now making to bring beef from the South-American pampas, and mutton from Australia, in the same way to our markets, and, if it fails, it will not be from lack of antiseptic power in the refrigerating chambers of the ships, but from the inferior quality of the beef and mutton, and the defects in the proper methods of packing.

By an analogous process of refrigerating chambers in steamships, or refrigerating houses in our cities, it has been demonstrated that it is possible to preserve our own fruits, and the delicious grapes, oranges, lemons, guavas, pomegranates, bananas, and other tropical fruits, which hitherto have never reached

us in their perfection, from any considerable decay for months, or even years.

The same antiseptic quality of ice enables us to preserve, by means

of it, the remains of our friends from too speedy decay while awaiting the last sad rites of burial. Of its uses, resulting from this quality, in medical and surgical treatment, we shall speak farther on.

Some of our readers may think that it is hardly necessary to say that ice, like some of the parties who deal in it, is decidedly cool; and yet this very quality of coolness is what gives ice its principal value. Without the addition of its cooling property, the Croton, the Ridgewood, and possibly even the Cochituate water, would be, in

summer at least, flat, stale, and unprofitable. What would the venders of soda and mineral waters, of root and medicated beers, lager-bier, and similar beverages, do without ice to make their otherwise often distasteful drinks cool and palatable? Who does not know that the delicious coolness imparted by ice to more potent stimulants, the iced champagne, milk-punch, sherry-cobblers, mint-juleps, and the thousand other concoctions by which alcoholic liquors are disguised and rendered palatable, is the cause of the very great increase in their use? The confectioner's art, too, is greatly indebted to this gelid

quality of ice, for many of its most popular preparations, the ice-creams, fruit-ices, and other summer confections, owe their toothsome-ness largely to the presence of ice in them.

In the latter part of the last century and the early years of the present, wealthy citizens in the country often built ice-houses on their grounds and filled them during the winter from some spring, pond, or stream, near by, for use during the summer months; the small farmers and less wealthy

classes were fain to use some cool spring or a deep well, if they had one, as their refrigerator. In the cities ice, seventy years ago, was a rare and precious luxury; and various were



GROOVING THE ICE.



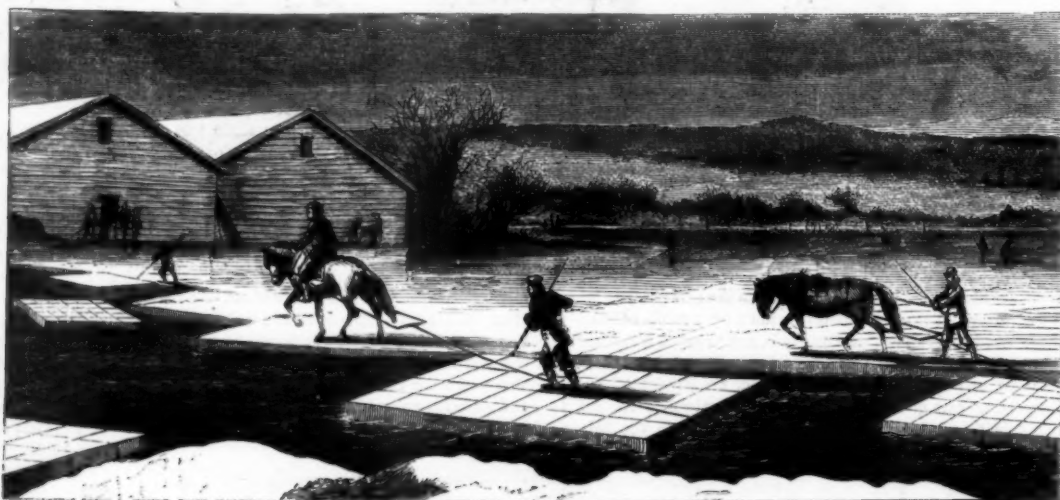
SAWING THE ICE AND BEARING IT OFF.

the substitutes devised to answer its purpose. The butchers and butter-dealers usually had small quantities brought from some ice-house at a distance, but the citizens generally could only rely on cool cellars and pump or well water. Now, in the large and small cities and most of the larger towns, every family has its refrigerator, and receives its daily or tri-weekly supply of ice during the warm season, and ice has become no longer a luxury but a necessity to those myriads of households.

In the threatened ice-famine of the summer of 1870, though the price to which ice advanced caused a very great decrease in its consumption, still there were thousands of families who would have as soon abstained from the use of meat as of ice; and to many of them the enhanced price was as real and as cruel a hardship as the quadrupling the price of bread would have been.

It remains that we should speak of the use of ice for medical and surgical purposes. This, like most of its other economical uses, is for the most part of recent discovery and application. For arresting hemorrhage and allaying pain, by its benumbing influence, in surgical operations, ice is one of the best and most efficient appliances of the surgical armory; it is also used to some extent in the treatment of

reaches the temperature of 39° , water, in giving up portions of its latent heat, contracts, though very moderately; between 39° and 32° (the point of solidification), it expands about eleven per cent., or one-ninth of its previous bulk; and this expansion is so irresistible as to form an explosive force nearly equal to that of gunpowder, calculated by physicists at twenty-seven thousand seven hundred and twenty pounds to the cubic inch. The reason for this departure from the general law in the case of the solidification of water is obvious, though it has never, so far as we know, been adduced as among the evidences of design on the part of the Creator. If water, like the oils and the mineral salts, became heavier when it became solid, it would sink to the bottom of the lake, pond, or stream, on which it formed, and the successive layers of ice formed in a cold season sinking as they congealed, the body or stream of water would be wholly solidified, and would only become liquid again after a long season of excessive heat. This would lead to the destruction of the finny tribes which inhabit the waters, to the diminution of the evaporation from their surface, and the consequent diminishing of the rainfall; to a lower mean of animal temperature, backward seasons, and small and imperfect crops. The regions where the ice sunk as it froze would soon become a bleak



DRAWING THE ICE-BLOCKS TO THE ICE-HOUSE.

aneurisms, and sometimes in encephaloid tumors. In medicine it is, in judicious hands, one of the most valuable and potent articles of the *materia medica*. It is used in the treatment of inflammation of the brain, inflammation of the stomach or intestines; in the discussion of inflammatory tumors, carbuncles, etc.; in the treatment of cholera, yellow fever, and *isletritis*; as an application to the spine, in spasmodic diseases, and in inflammation of the spinal cord or its membranous coverings; in mania-a-potu, and delirium tremens, and in various other diseases, characterized by excessive excitement of the circulatory system. It ranks among the best remedies in the hands of the profession; yet, though it may be considered valuable for both internal and external use, it is not, like the much-vaunted salve, to be used "externally, internally, and eternally." In midwinter, with the thermometer at zero, it must be a fierce fever or inflammation which will require a very free use of ice; but, amid the inflammatory diseases of the summer months, it is not only beneficial, but generally very agreeable to the patient. Ice has its peculiarities. While chemically it is only crystallized water, we find, in investigating the circumstances of its congelation, some things which surprise us, or would, if we gave them thought. The freezing-point of fresh water is said to be 32° Fahr.; yet, if the water is kept perfectly still, and nothing is thrust into it, the temperature may fall to 15° , or, as some chemists assert, to 5° before it congeals; the moral to be drawn from which is, "Keep still if you do not want to get into a fix." Another of its peculiarities is that, while most liquids contract on assuming the solid form, water expands. It does this, however, only within certain limits. Till it

and barren desert. Under the existing natural law the water beneath the ice retains a temperature not below 32° .

Another peculiarity of ice is its greatly increased density and tenacity under protracted and severe cold. Most liquids, on assuming the solid form, retain that form, without material change, so long as the temperature remains below the point of liquefaction, a further decrease of temperature effecting no perceptible difference in their density; but the ice, formed at a temperature of 25° to 30° Fahr., is as different from that which is found when the temperature has ranged for some time between 10° and -10° Fahr., as chalk is from granite. The ice at the lower temperature is dense and hard as a flint; it strikes fire with the pick or the skate, and, as in St. Petersburg, in 1740, when masses of it were turned and bored for cannon, though but four inches thick, they were loaded with iron cannon-balls, and a charge of a quarter of a pound of powder, and fired without explosion.

Still another peculiarity of ice is that in the process of freezing the impurities (salts, etc.), held in solution in the water are eliminated, and only the pure water takes on the crystallized form. This is a very important fact, and is often made use of by practical chemists in concentrating tinctures, vinegar, alcoholic preparations, etc., by freezing out the water which they contain.

The ancients gathered snow, and packed it in caves and pits, for use in cooling the water and wine which they drank, and even the nectar of the gods was said to be cooled by snow from Mount Olympus. The Italian peasants still gather the snow from the Apennines, and pack it in caves and pits; and in Naples, Rome, and Flor-

ence, the snow is States of ice, offering Wenham at the people for ing for snow; b informed could no mitted, right t and ve snow wa ed right Italian and mus disturbed.

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ence, there are numerous snow-shops, where this soiled and impure snow is sold during the warm season. Mr. W. J. Stillman, late United States consul at Rome, attempted a few years since to introduce American ice there, offering the pure Wenham-Lake ice at the price the people were paying for this dirty snow; but he was informed that it could not be permitted, as the right to gather and vend this snow was a vested right of the Italian peasants, and must not be disturbed.

The ice business has grown up from small beginnings to be one of the largest of the minor industries in this country. It employs a capital of not less than twenty million dollars, and the aggregate sales of ice are somewhat more than thirty million dollars. Forty years ago the capital invested was less than one hundred thousand dollars, and the aggregate sales not more than one hundred and twenty-five thousand dollars.

There are now in New-York City five or six ice companies, with an aggregate capital of nearly four million dollars. They will market in average years about a million tons of ice, supplying not only New-York City, but Brooklyn, and the other towns and cities of Long Island, Staten Island, Westchester, and the cities and towns of New Jersey adjacent to New York. Nearly one hundred thousand tons are exported to distant cities and foreign countries.

These companies have their ice-houses at between thirty and forty points on or near the Hudson River, and at such lakes as are accessible by railroad, and within convenient distance of the city. These ice-houses have an aggregate capacity of about a million tons, but some of them are filled more than once a year, the sale continuing to a moderate extent through-

out the winter months. They will employ the coming season about forty barges of from four hundred to eight hundred tons each, five steamers, nearly three hundred wagons, about five hundred horses, and seven hundred men. In the summer of 1870 the prices of ice

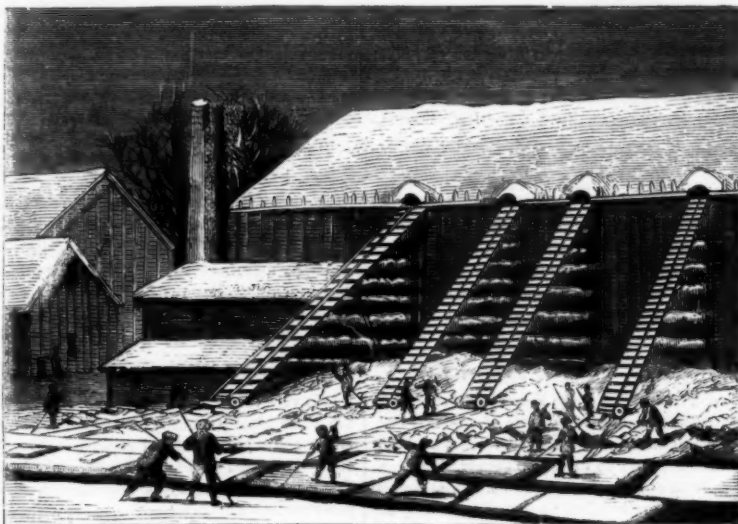
were, to the large hotels and packing-establishments, seventy-five cents per hundred pounds; to butchers, druggists, and the larger grocers, one dollar per hundred; and to families and small consumers, from one dollar and fifty cents to two dollars per hundred pounds. Even with these exorbitant prices, which the companies justified on the ground of a threatened scarcity of ice, there was great, and, in many instances, just complaint of short weight and frauds in the delivery. This was undoubtedly often the fault of the drivers, who made a considerable daily profit in selling to others than their regular customers; but their delinquencies were overlooked or very leniently treated by

the managers themselves, and there was some reason to believe that some of these participated in the fraudulent gains.

The export of ice to foreign countries had its origin at Boston, within the present century, and has only attained to any considerable importance within the past thirty-five years. It has been stated, jestingly, that Massachusetts had but two agricultural crops for export, granite and ice; but she has made both the sources of great profit to her. The ice-crop, however, was not discovered as an article of export till 1805, when Mr. Frederick Tudor, of Boston, sailed in his own brig, with a cargo of one hundred and thirty tons of ice, for Marti-

nique. Much of this melted on the voyage, and the remainder sold slowly and only at a loss; but Mr. Tudor persisted in the business, though without profit, till the War of 1812 commenced, and for the time put an end to the trade. In 1815 Mr. Tudor obtained some exclusive privileges from the Cuban Government, and between 1817 and 1820 began to send cargoes also to Charleston, Savannah, and New Orleans. But he

met with frequent disasters, and often, from long passages, lost the greater part of his cargoes. As late as 1832, his whole shipments for the year amounted to only forty-three hundred and fifty-two tons, all of which was taken from Fresh Pond, in Cam-



ELEVATORS AT THE ICE-HOUSE.



STORING THE ICE.

bridge. In 1833 he sent his first cargo to the East Indies. Of one hundred and eighty tons shipped, eighty melted on the passage to Calcutta, but what was left sold promptly at a remunerative price. From this period the business began to thrive. In 1836, the exports from Boston were twelve thousand tons; in 1846, sixty-five thousand tons; in 1856, one hundred and forty-six thousand tons; in 1866, nearly two hundred and fifty thousand tons. The export from the Northern ports is now in all about five hundred thousand tons. A very considerable amount is sent to British and Continental ports, and large quantities also to Brazil and other South-American states. About two hundred thousand tons are sent from Boston, Portland, Bangor, and New York, to the southern Atlantic and Gulf cities. Immense quantities of ice are harvested every year from the great lakes, not only for the supply of Chicago, Detroit, Buffalo, Toledo, Milwaukee, and other lake cities, but to send to Cincinnati, Louisville, St. Louis, Memphis, New Orleans, and other cities and towns of the Southwest.

The gathering of the ice-harvest is a lively and stirring season. We have already said that the supply of ice for the New-York market comes mainly from the Hudson River above tide-water, from the coves, bays, and inlets along its shores, and from the small and pure lakes near to the river, or to some one of the great railroad routes leading to the metropolis. The Boston supply, both for home consumption and export, is derived from several lakes at no great distance from Boston; that of Portland and Bangor, from the Kennebec, Penobscot, and Androscoggin, above tide-water, and from some of the lakes of Maine. In the West, the great lakes, and the smaller lakes of Wisconsin, Minnesota, and Michigan, yield an unlimited supply. The ice-houses are huge buildings, from one hundred to two hundred feet in width, and from two hundred to four hundred in length, generally of wood, though sometimes of brick, with double, triple, or quadruple walls, the interstices usually packed with some non-conducting substance, such as spent tan-bark, sawdust, etc., with doors closing tightly on each floor, but no windows, and with inclined planes, movable, and adapted to each story, without as well as within, and, in the case of the larger ice-houses, a steam elevator is employed to drag the blocks up the inclined planes and lower them on the inside.

A favorable time having arrived for storing the ice, after a considerable period of severe frost, the fields are temporarily fenced; the snow, if there is any, is scraped off by a broad scraper, drawn usually by one horse, and the ice planed by another scraper, armed with a steel blade, to the depth of two or three inches, to remove the porous ice. Then comes the marker, a sort of plough which cuts a narrow groove, perhaps three inches deep, drawn by one horse—for, in this harvest, the ploughing and reaping are done the same day—and, when the marker has run a series of parallel lines five feet apart, it is turned the other way and crosses these with other grooves, also five feet apart. These grooves are deepened, and the size of the blocks reduced, by a sort of harrow, with three or more parallel rows of long and sharp teeth, about two feet apart, one row running in the grooves already made. Sometimes another plough, with a long, sharp, and comparatively thin tooth, or blade, is run through the principal grooves, if the ice is very thick. One row of the blocks is then cut through to the water underneath, by means of handsaws, and these blocks are hauled up on the ice adjacent, and run to the inclined planes, or loaded on sleds. The work now begins to be lively. As it is always uncertain whether there will be another favorable time for housing the ice, all hands drive their work as rapidly as possible. One gang, armed with crow-bars, thrust them into the grooves, and pry off the blocks; another catch them with a kind of spear and hook combined, and drag them into the canal formed by raising the blocks already described. Others attach to a sheet of perhaps fifty squares, a grappling-iron, with a long chain, and it is towed by horse-power toward the ice-house, either through the water, or, one end being tilted, it is raised on the icy surface and dragged swiftly to the elevator. Here, in blocks of five feet square, or smaller if desired, it is run up the inclined planes by the elevator and lowered on the inside, men being ready to receive it and pack it, standing on edge, with layers of sawdust, shavings, rice hulls, or spent tan. One story or floor being filled, the sliding-doors are closed, and the next floor above is stowed in the same way, gutters and drainways near the walls receiving and carrying off the drainage and water from the melting of the ice. The houses, as fast as filled, are closed as tightly as possible, and they are only opened as the ice is wanted for immediate consumption. During this harvest season—which seldom lasts more

than four or five days at a time—if there is moonlight, the work is often continued through the night as well as the day, and the scene is an animated and beautiful one. The men and animals seem stimulated to the utmost exertion, and all work with a will; at some of the houses of the Knickerbocker and Washington Ice Companies, six hundred tons are housed in an hour. Ice is too perishable an article, in warm weather, to bear many handlings. If wanted for export, the vessel to be laden comes, if possible, to the ice-house, and receives its cargo with but a single handling. The shippers have usually, at the port to which they are bound, a suitably-constructed ice-warehouse, where the cargo can be stored till sold; but each transfer is attended with heavy loss from melting. If the ice is intended to supply the city trade, it is loaded on the barges, which are peculiarly constructed for this business, and a half dozen or more of them are towed down by a steamer (barges and steamer being both owned by the company) to the company's docks, and either stored in their city warehouses, or, if the demand is active, loaded immediately upon those huge, heavy wagons which shake all the houses on the street by their jarring thunder. In an average season, the net cost to the company of the ice ready for delivery to the customer, does not much, if at all, exceed three dollars per ton. When there is a scarcity of the commodity, and the company are obliged to supplement their own stock by purchases from Maine or elsewhere, this cost may be doubled; but this is very rarely the case. The average price to the consumer, of the three classes already named, during five years past, has been about eleven, thirteen, and sixteen dollars, the average being considerably increased by the extraordinary high prices of the last season. The competition from the organization of new companies, and the pressure to sell the vast quantities of ice stored during this very favorable season, will probably materially reduce the price of this commodity to our citizens, but will be very certain to increase largely the quantity exported to foreign countries. In 1870, prices at home ruled so high as to render foreign exportation comparatively unprofitable, and it had accordingly fallen off to about sixty-three thousand tons. The home market, in fact, is much the largest and most certain. In 1856, New-York City consumed and shipped two hundred and eighty-five thousand tons of ice. In 1866, the supply was four hundred and fifty thousand tons; in 1871, it will exceed one million tons. Very few branches of business have had so rapid a development.

UNCLE SAM'S STRONG BOX.

THE Treasury Building in Washington covers three acres. Built of granite, after a Grecian model, its pediments shaped upon the spot, and its pillars monoliths, its length and breadth in true proportion to its height, and its ornaments and fittings, fountains and gardens, approaches and esplanades, corresponding to each other and to the whole—it is, perhaps, more nearly perfect than any other public edifice in America.

Within its walls are the offices of two cabinet-ministers and eleven heads of bureaus. There are chiefs of divisions, comptrollers and their subordinates, auditors of claims and accounts, printers of the currency, women who copy, and men who revise, mechanics and laborers, messengers and watchmen, operatives and their superintendents, cunning artificers who engrave and deft experts—who examine—including, all told, fully three thousand souls. Of the complex working of this vast living machine, of its wheels within wheels, of the grades of office, payments for services, and specialties of divisions, I do not purpose to write. I wish simply to describe one bureau—that of the United States Treasurer, the depository and guardian of the people's money. This office, the Treasury proper, occupies the place of honor in the building, the principal entrance in the magnificent new north front leading directly to it. Entering, the visitor's eye is attracted by an inscription, "The United States Treasury." This is over the door of the cash-room, one of the finest business rooms in America. A gallery opening from a corridor in the second story—for the cash-room comprises two stories in height—affords the visitor a view of the interior. It is seventy feet long by thirty broad. The floor is of marble; marble columns with exquisitely-wrought capitals and bases sustain the ceiling, and panels of the same set in frames of a different hue form the sides. The walls alone cost sixty-five thousand dollars, and the bronze railing, of beautiful design, enclosing the gallery, cost twenty thousand.

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Descending, and passing through the cash-room to a corridor near by, one sees huge iron panels which appear to form part of the walls. They extend from floor to ceiling, and bear heavy mouldings. In the centre of each is the national shield, and the letters U. S. These panels form one side of the great vault—"Uncle Sam's" strong box. I had imagined the government treasure hidden away in some remote underground cell, as if it were the hoard of a miser, but the money-vault opens from a frequented corridor, receiving abundant daylight from one of its broad windows. The assistant treasurer, kind and obliging as he is efficient and faithful, bids us enter. It is a room about twelve feet square, with little in appearance to indicate its character or purpose. No imposing display of strength impresses the visitor. The barriers of iron and depths of granite which stand between millions of treasure and the midnight torch or burglar's implements, are concealed behind light wooden cases, such as might belong to a housekeeper's linen-press. The echo of his footstep on an iron floor, and the ponderous door with its huge lock so fearfully and wonderfully made, are all that remind him that he is within the fortress of a nation's wealth.

The doors of the cases opening, one sees canvas-bags tossed carelessly in heaps. They contain one hundred million dollars in gold. Here are two hundred thousand dollars which were taken from Jefferson Davis, at the time of his capture. The total value of money now in the vault is four hundred millions. Huge packages of greenbacks, fresh from the engravers' hands, cut and signed, are stored away ready for circulation, and box upon box filled with fractional currency load the shelves.

Near the money-vault is another, similar in appearance and surroundings. Its walls are lined with pigeon-holes. These are filled with envelopes containing bonds sent here by national banks as security for their circulation. The largest deposit is that of the Bank of Commerce of New York—seven and a half millions, the annual interest upon which amounts to over four hundred thousand dollars. Sixteen hundred and ninety-five banks are represented. No other deposits are kept.

The daily receipts of the Treasury, from assistant treasurers, and from all sources, are placed in the money-vault. There are seven sub-treasury offices tributary to this—at New York, Boston, Philadelphia, St. Louis, New Orleans, Charleston, and San Francisco. The transactions of all these offices are daily reported here to the Treasurer of the United States.

An important branch of the Treasurer's bureau is the redemption division. Each mail brings to the department hundreds or thousands of dollars in worn-out currency. It is taken in by banks and post-masters. When received at the Treasury, an account is first made of it, when it is sent to the desks of the female clerks, of whom there are one hundred and eighty-three in this bureau. When smoothed out, carefully examined for counterfeits, and recounted, the bills are done up in packages, each consisting of notes whose value is expressed by a multiple of one hundred. A paper-band is pinned round either end, upon which is written the name of the clerk who counted it, and the result of her count. Its equivalent is there made up for the bank or post-office transmitting it, in fresh new currency. Should counterfeits have been sent, they are deducted, branded, pinned suggestively to the letter acknowledging receipt, and returned. The packages of worn-out notes are next taken to a machine which punches a hole in both ends, and then to a cutting-machine, which divides them in halves. These halves are packed in separate boxes, one box going to the office of the Treasurer, the other to that of the Register of the Treasury, where they are counted for the third time. If the result be the same in both offices, the count is supposed to be correct. The notes are then burned, and the Treasury is at liberty to issue new ones in their places.

This burning is quite a formal affair. If Treasury notes (greenbacks) are to be destroyed, the burning is presided over by four officials—one each from the office of the treasurer, register, and secretary, and some person outside the bureau, who is appointed by the Secretary of the Treasury. If the destruction be of national bank-notes, the fourth witness is selected by the bank directors. These witnesses are present to see that the money is actually burned. Filthy lucre, literally and figuratively, it is. Any thing else except money, half so nasty, would be spurned in disgust.

Many of the women engaged in the redemption-bureau become exceedingly expert in detecting counterfeits, matching fragments of notes,

and counting currency. The ends of their fingers are educated to such a degree of sensitiveness that they discover counterfeits simply by feeling. A gentleman who, I think, must have been slightly jealous of this new competition in the labor-market, said: "No wonder they count money rapidly, they are so light-fingered." But their superior officers bear witness to the fact, not only that lightness of fingers enables them to count money rapidly, but that they possess a quickness of perception by which they count with fewer mistakes than men. It seems hard, though no doubt necessary, that if, in spite of their carefulness, a counterfeit *does* escape their facile fingers, or an error occur in their reckoning, they are obliged to make up the loss from their own pockets. New clerks often lose considerable sums in consequence of such mistakes.

The proverbial patience of women is put to excellent account in this bureau. Packages of money occasionally come for redemption which have suffered shipwreck, and lain, perhaps for months, under water. Many there are, of course, torn to fragments. Color has disappeared from backs and faces. The fibre of the paper is gone. To touch is to destroy them. What was done with these sorry bits before government employed women, I do not know. Imagine the pulpy, half-macerated masses sent to the desk of a man! Do you not think they would be emphatically pronounced worthless, and the whole lot consigned to the fire forthwith? The lady clerks have undisputed monopoly of this sort of business. They patiently sit down and pick out, bit by bit, the crumpled, faded fragments, smoothe them, match the pieces, paste them on a new back-ground, and, in most instances, restore them in such degree that the denomination can be ascertained, and their owner saved a loss.

Notes which have been damaged by fire are treated in the same manner. Charred and blackened inside some safe which has survived a conflagration, so thin that a breath would blow them away, or a touch reduce them to ashes, one of these expert clerks, nevertheless, with her delicate fingers, fits the tatters together, and so arranges the ashes that the figures appear again, though in shadow, dimly yet incontrovertibly attesting the fact that such notes have once been issued.

Occasionally it occurs that persons who have defrauded the United States Treasury are troubled in conscience, and prompted to return stolen money. An account is kept of all such receipts. Somewhat over one hundred thousand dollars have come back within the past six years, and been placed to the credit of the sinking fund. Imagine the repletion of the United States coffers, were a spasm of remorse to convulse delinquent army contractors into restitution of their ill-gotten gains!

An account is kept of all moneys received at the Treasury—by whom it comes, for what purposes, whether customs, taxes, sale of lands, internal revenue, or loans. A similar account is kept of moneys paid out—whether on account of public debt, army, navy, diplomatic and department officers, or miscellaneous expenses. This business done is, of course, immense. A sight of the archives only bewilders. Vast corridors in the basement are lined with cases; every letter received is filed away; and of every official communication sent, the number of which amounted to one hundred thousand last year, a duplicate is kept. There are huge registers in which every letter is classified, so that, if called for, it is forthcoming. There is no confusion. Mistakes are unknown. System makes every thing perfect, even to the minutest detail.

The public crib is supposed to offer peculiar facilities for speculation; yet it is officially stated that, during the eight years since the present treasurer came into office, not a cent has been lost to Government, either through the incapacity or misconduct of any of its servants in this bureau. Slight mistakes have occurred, but the loss resulting has been made up by persons responsible for them, or by their fellow-clerks. This fact is the more remarkable, inasmuch as these eight years include four of the war, during which the amount of business was increased twenty-fold. We must conclude that Government has been more fortunate in the selection of its cashiers and tellers, than banks throughout the country. Hardly a week passes but the newspapers bring us stories of defaulting presidents, runaway cashiers, or thieving tellers; yet, from the United States Treasurer's office, not a cent has been stolen for eight years. No wonder the head of this bureau is chosen treasurer of charitable and patriotic associations! No wonder he is considered indispensable to the Administration, and that, during the last quadrennial scramble for office, no man had the audacity to ask for his place!

LAURA M. DOOLITTLE.

TABLE-TALK.

THE question of rapid transit between the upper and lower extremities of New-York Island is revived again this winter, with interest strengthened by the ever-increasing necessity of some method by which the heart of the city can be reached more expeditiously than now. We imagine this great desideratum to New-Yorkers has been delayed in consequence of so many divided and contending projects. The interests so deeply concerned in the matter do not unite upon any definite principle, and so far nothing seems to have been settled, excepting an admission as to the cardinal necessity of a plan of some sort. Whether the road shall be an underground road, a sunken road, or an elevated road, still remains a matter of dispute, and each project has its clamorous and persistent faction. It would be well, before charters are granted, or any thing done tending to commit the government or the people to any particular plan, that a searching inquiry should be made into the feasibility of the various methods proposed. Is an underground road practicable? Is it likely ever to have travel enough to pay interest on its great cost? What has been the success of the underground system in London? Of the two methods now in operation in that city—the underground and the viaduct—which is the more successful? A commission should be sent to London to ascertain all these things. It is quite unnecessary for the people of New York to go blindly experimenting in so important a matter, when they have full opportunity to investigate the practical operation of two distinct systems. An English engineer has recently given us assurance that the viaduct roads in London are far more profitable and more popular than the underground lines. The underground roads, although making small dividends for the present, as sort of bribes to keep up the courage of the stockholders, are scarcely paying expenses. The viaduct roads, on the contrary, are doing exceedingly well. If these statements are correct, and we have reason to believe they are, they ought to aid us here in solving the problem which has so long vexed us. If a conviction should spread that an underground system is impracticable or unadvisable, and all the interests unite in agreeing that the road must be an elevated one, we should then, probably, soon reach an agreement as to whether a viaduct system, running through the centre of the blocks, and built on arches, or a simpler elevated track, something after the manner of the Greenwich-Street road now standing, should be the design. The failure of the Greenwich-Street road gives prominence to the viaduct plan. This method seems to us to meet more nearly than any other the requirements of such a road. Built on arches of great massiveness and strength, it would admit of the highest rate of speed. Running midway between the avenues, through the centre of the squares, it would occupy no space now employed for ordinary traffic. Crossing the streets that are at right angles with it on high and enclosed viaducts, there would be no disturbance of any kind to the

travel below. The cost of such a road would be partly relieved by the uses to which the spaces beneath the road could be put—which in some quarters could be leased for storage, and in others for ordinary business purposes. But, whether this plan be adopted or not, it would hasten the consummation of the great need if all question of an underground road could be eliminated from the problem. Ordinarily we prefer to see enterprises of this character accomplished by private effort; but it would seem, in this case, as if greater success would be assured if the matter were referred to a commission, and made a State affair.

— The siege of Paris by the Germans, in 1870-'71, will undoubtedly take rank among the most celebrated events in the annals of mankind. It has, indeed, few parallels in history, and those only in the remote past. Very seldom has a city of such magnitude, filled with a warlike, well-armed, and determined population of millions, been assailed by a force numerous enough to invest it completely, and to hold at the same time the besieged in check, together with great armies organized for their relief in the yet unconquered provinces. The sieges of Nineveh, by the Medes (n. c. 606); of Babylon, by the Persians (n. c. 538); of Carthage, by the Romans (n. c. 146); of Jerusalem, by the Romans (A. D. 70); of Rome, by the Goths (A. D. 410); and of Constantinople, by the Turks (A. D. 1453)—are those which most resemble that of Paris in magnitude and importance, if we except the less known, and to us less interesting, sieges of the great cities of Eastern Asia. In Nineveh, Babylon, Rome, and Constantinople, it is possible that the besieged population may have equalled that of Paris. Of the number of their besiegers we know little except in the case of the Turks, who invested Constantinople with an army about as numerous as that which has just reduced Paris. All these famous sieges, like hundreds of others in history, were successful. In fact, it is almost certain, from the perfection of modern military science, that any city invested and besieged must eventually surrender unless relieved from the outside. For Paris there has been no real hope from the beginning of the siege. Its result was determined beforehand by the surrender of Sedan, and still more by the surrender of Metz—capitulations which deprived France of nearly all her regular army, and, still worse, of nearly all her capable and experienced officers, and left her defence to the hands of raw levies with unskilled commanders. The French armies in the field were insufficient to cope with the Germans who were not needed for the siege of Paris. The attempt to carry on the war after the catastrophe of Sedan, and especially after the still greater catastrophe of Metz, would never have been undertaken by a regular or legitimate government. The prolonged and ruinous resistance of France and of Paris was the work of adventurers with every thing to gain and nothing to lose by the continuance of hostilities. So long as the war continued under their usurped rule, they were princes and great personages, inhabiting palaces, exercising power, and controlling vast sums of

money. Peace to them meant abdication of their authority, and speedy return to obscurity and poverty. They, therefore, stimulated the people to resistance by false reports and baseless hopes, and the people—brave, patriotic, and high-spirited, though fearfully ignorant—responded vigorously, and, both in Paris and in the provinces, have made a very gallant and heroic struggle without the slightest chance of success. The result is exhaustion, devastation, and anarchy. It will take France a generation to recover from the merely material losses of the war, and perhaps as long to recover her moral tone and her power of self-government. At present she seems plunged into a political chaos, out of which no one can predict in what shape she will emerge. One lesson she has assuredly learned, and that is, not to make war upon Germany without provocation. For years to come, perhaps for ages to come, she will doubtless remember this salutary lesson, and let her powerful neighbor severely alone.

— Mr. Edwin Forrest is now playing at the French Theatre an engagement which will probably be his last in this city. It is fully fifty years since Mr. Forrest made his first appearance as an actor, and more than forty years since he attained a recognized position as at the head of the American stage. At eighteen years of age Forrest began his dramatic career; at twenty-six he had reached the highest point in his profession. Since then his career has, in one sense, been uniformly successful; he has made much money, and he has always addressed a large circle of admirers. But he has not quite retained the place in popular affection that he once possessed. There are various reasons for this, some of which do him honor, and others his enemies remember, while his friends extenuate. Mr. Forrest's temper has not been conciliating. He became involved in domestic difficulties, in which his cause was so managed that, while actually in the right, he was made to appear in the wrong. He quarrelled with Mr. Macready, the great English actor, without taking pains to be in the right. And, whether in the right or the wrong, he has invariably so scoffed and scorned the public press that he long since converted nearly the whole host of dramatic critics into enemies. Proud, reserved, somewhat bitter, Mr. Forrest so rebelled against those wiles and intrigues that make popular opinion that he carried his virtue to a vicious extreme, and forgot the ordinary amenities of life. These things have raised against him a formidable host, and have been the means, indirectly, of leading to a depreciation of his genius as an actor. It has become the fashion in America of deriding and underrating the one distinct American exponent of dramatic art. It has gone forth as a dictum that Forrest is a physical actor, a coarse actor, a rude, uncultivated actor. He is of so large and massive a make that, in one sense, he is a physical actor, and, no doubt, some of his effects are enhanced by or derived from this circumstance; and that some of the characters that he plays have a rude charm to the multitude, on account of his splendid presence, cannot be denied. But those who say he is not an intellectual actor do not judge, we think, correctly. We venture

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to assert that he is the closest student now on the stage. Mr. Forrest, old, massive, infirm, is very far indeed from the ideal of Hamlet; and yet, those who can study the rendition of a part on its intellectual plane, without regard to physical advantages or disadvantages, must admit that the Prince of Denmark has no representative who brings to it a more scholarly taste. The readings of the soliloquies are exceedingly beautiful. Mr. Forrest is, like some other actors, more satisfactory in his level talking than in his passionate outbreaks. In colloquial delivery, he is simple, yet rich in every grace of true elocutionary art. In the soliloquies of Hamlet, his musing, abstracted utterance of those famous passages has the highest excellence. They are spoken with entire conception of their meaning, and every line is the result of a study far closer than our young actors have any conception of. Taking the single part of Hamlet as a test—and there can be no better—we believe every unprejudiced mind capable of judging will admit that Mr. Forrest's rendition of the part is, intellectually considered, in advance of all others. We utter this defence of Forrest because his theatrical career will soon end, and we would fain see, ere it is too late, greater justice done to a man whom once it was the fashion to praise too highly, and who now suffers, at the hands of certain people, unwarrantable neglect.

—Mr. Charles Francis Adams, in a recent lecture, expressed the opinion that the American people cherish an undying hatred of England. This assertion, coming from such high authority, is entitled to every respect, and, if true, may well excite mournful apprehensions in the breast of every true lover of his country. But is it true? Are not national dislikes, as well as local and religious hatreds, matters of complex, shifting, uncertain, and manifold character, easily excited, perhaps, but as easily diverted, and rarely so profound or uncompromising as not to be connected with many cordial sympathies? The bonds that unite people, and the issues that separate them, are usually bonds and issues pertaining to single questions. A man of Massachusetts and a man of South Carolina, having identical religious convictions, will unite fraternally in some cause having a denominational advantage in view, and, on political questions, uncompromisingly oppose and denounce each other. If some expert social anatomist were to trace, through all their ramifications, the strange combinations in which men shift in their relationship to each other, from foes to friends, and friends to foes, the exhibit would be a singular and an entertaining one. On all questions of national difference, there is in America a united hostility toward England, and yet we do not believe there is among us "an undying hatred" of the English people. It is easy to mistake this political opposition for a general dislike, especially by one who is distinctly canvassing the public sentiment, because, even if he has not inflamed the popular imagination, he has invited an expression of feeling on the one narrow point only. A larger investigation would discover that each man, with all his political rancor, has a special bond of union

with England. Some of the community delight in her Church, others in her literature; some are admirers of her great men, others have kindly recollections of her hospitable, and all unite in appreciating her many steady virtues. If one were to judge solely by political journals and political discourses, he would justly infer that Democrats and Republicans have for each other "undying hatreds." The religious newspapers appear to indicate intense hostility between denominations, and local animosities between rival cities are always aflame. But these manifestations of hostility are usually as superficial as they are inflammable. Let us hope that America, with prejudices and dislikes too many, has no "undying hatred" for any thing but evil; and that, in her heart of hearts, there is no lack of kindly sympathy for her Cousin Bull.

—Our illustration on the first page, of "a Nook on the Hudson," represents a scene on the east bank of the river, above Peekskill. A modest and solitary cabin stands near the water's edge, on a little plain closely hemmed in by giant walls of granite, surmounted by dense woods, and forming, in all its surroundings, a thoroughly romantic scene. This place, so quiet and secluded, was many years ago the scene of a shocking tragedy. A bridal party, full of life and gayety, were returning from the performance of the ceremony, when, as they passed along the road above this spot, the horses of the carriage containing the bride and bridegroom became frightened and dashed over the precipice, at the foot of which the bodies of the newly-married pair were found mangled and lifeless.

Literary Notes.

THE Paris correspondent of the *Publishers' Circular* writes, in December: "There is scarcely a bookseller's shop open. All the German booksellers have been expelled the country; even Herr Friedrich Klincksieck's position as bookseller to the French Institute, and to the Imperial Library, did not exempt him from this stupid measure. His shop is closed, and all his young men have quitted France with him. Messrs. Hachette & Cie. keep open, but they have now only twelve persons in their immense establishment. They have discontinued the publication of all their periodicals; so have Messrs. Firmin Didot. 'La Bibliographie de la France' has suspended its appearance. Many of our newspapers have ceased to appear for lack of paper; the majority of the others (among them *Le Journal Officiel*) publish only a half-sheet. No books whatsoever are sold."

Messrs. J. B. Ford & Co., of this city, have published a very useful and valuable work entitled "Mines and Mining of the Rocky Mountains, the Inland Basin, and the Pacific Slope. Comprising Treatises on Mining Law, Mineral Deposits, Machinery, and Metallurgical Processes." It is edited by Professor Rossiter W. Raymond, United States Commissioner of Mining Statistics, and editor of the *Engineering and Mining Journal*, of New York. The object of this work is to convey full information concerning our American mining industry, its condition, profits, methods, and appliances. It comprises a description of all the gold and silver mining districts of the West; a careful discussion of the laws affecting their titles; a

thorough essay on mineral deposits in general, their occurrences, characters, and classification; twenty-seven chapters, profusely illustrated, on the mechanical appliances of mining and on metallurgical processes; and an appendix, with valuable tables of statistical information. Three alphabetically-arranged analytical indexes, one of Mines, one of Mining Districts, and one of Subjects, complete the work. It is a large work, of eight hundred octavo pages, illustrated in matters where illustrations are needed, and appears fully to exhaust the theme on which it treats.

J. B. Lippincott & Co. announce that, providing a sufficient number of subscribers can be obtained, they propose to publish "The Life of the Hon. John J. Crittenden, with Selections from his Correspondence and Speeches," edited by his daughter, Mrs. Chapman Coleman, with two portraits engraved on steel, in two handsome, large octavo volumes, printed on toned paper, and bound in fine cloth. His correspondence, which contains much important information in connection with the political history of the United States, as expressed both in the letters from his own pen and the communications from such distinguished contemporaries as Webster, Clay, Taylor, Scott, etc., will be included in the volumes.

The works of "E. Marlitt" (Mdlle. John, of Arnstadt) have had the widest circulation of any novels written by German women. "Goldela," "The Old Mam'selle," and "Countess Gisela," are known wherever German is spoken. The success of these works is characteristic of the German middle classes, and of their family journal, the *Gartenlaube*, in which the tales first appeared. The writer possesses a decided talent for story-telling, and an unusual skill in depicting every-day life; so she manages to construct harmless romances, which delight and do not harm blond German misses.

We have received a copy of the "Annual Report of the Washington School-Board," for which we are indebted to Mr. George J. McLellan, chairman of the committee. Mr. McLellan's report is very full, copious, and interesting. We learn that Washington schools now number one hundred and nineteen, that nearly twelve thousand children are enrolled for attendance, and that, by excellent financial management, a surplus of one hundred and eleven thousand dollars remains in the treasury—the expenses having fallen short of the appropriations to this amount.

"Recollections of Society in France and England," by Lady Clementina Davies; "The Life and Adventures of Count Beugnot, Minister of State under Napoleon I.," edited from the French, by the author of "The Heir of Redclyffe;" "Impressions of Greece," by the Right Honorable Sir Thomas Wyse, K. C. B.; and "Turkish Harems and Circassian Homes," by Mrs. Harvey, of Ickwell Bury—are announced for publication in England.

The London *Spectator* says: "Mr. Swinburne has striven hard, no doubt, to erect an English literature of impurity, based on the best models of France; but, when the thing was done in plain English, its vileness, its want of manliness, its imp-like orgies, filled men of the world with unutterable loathing, which was only intensified by the plaudits of the little clique who placed the young poet in the same rank with Shelley."

Moritz Müller, well known for his opposition to classical studies, has just published a book called "In the Land of Thinkers," in

which he intentionally ignores the advantages of classical study, and brings out as his strongest argument against them the immorality of Greek and Latin authors.

Dr. N. Hoeker, the author of a "History of the War of 1866," which has reached its sixth edition, is now writing "A History of the Franco-German War of 1870," which will be completed at the end of the present war, and will be published by A. Bader, of Cologne.

An Italian author is now engaged in redeeming the memory of Catherine de Medici from the obloquy which, he says, has so long and so unjustly surrounded it. He intends to prove her one of the best of women.

A work, entitled "Travelling Letters from Egypt," by Louisa Mühlbach, the novelist, giving an account of her visit to Egypt, on the occasion of the opening of the Suez Canal, is well spoken of in Europe.

Lippincott's "Dictionary of Biography and Mythology" has now reached its twenty-ninth part, coming down to the end of the letter Q. This work is very comprehensive and valuable. Forty-five parts will complete it.

A series of papers is announced, by Charles Cowden Clarke, on "The Comic Writers of England." They will appear in the *Gentleman's Magazine*.

The heirs of Jane Austen have held, since her death, a novel, in manuscript, which is now to be published. The title will be "Lady Susan."

The long-expected "Life and Letters of Hugh Miller," the geologist, by Mr. Peter Bayne, is announced as in the press in London.

It is stated that three times as many Americans as Englishmen visit Stratford-on-Avon. Shakespeare is much more read in this than in his native country.

A London journal speaks of Bryant's translation of Homer as the best English version yet made.

Scientific Notes.

Professor Agassiz.

AN English journal publishes the following extracts from letters, addressed by Agassiz to a friend in England, from which it will be seen that the eminent naturalist has so far recovered from his late severe illness as to be able again to interest himself in scientific pursuits:

"I am slowly recovering, and find myself gradually returning to the ways of active life. As I wake anew to feel an interest in scientific pursuits, there is nothing for which I have a greater longing than the fossil fishes. If I could leave my house, I would fly to you to resume the examination of your and Lord Enniskillen's collections. The recent discovery of Krefft has added fuel to the fire, and I feel the most intense desire to revise the facts bearing upon the relations of the Ganoids and Selachians in general, and more particularly those of the *Calceanthi*, to which, from the examination of the skeleton sent me by Krefft, I find his *Ceratodus Forsteri* belongs. It will no doubt turn out that the Dipterini are close relations. In this connection I am reminded of what you once wrote to me of the teeth of *Ctenodus*. Will

you now have the kindness to give me all the particulars? I am having sections of the teeth of *Ceratodus Forsteri* and some of the fossil species made for comparison. I have little doubt already that this genus will turn out to be one of the most curious *synthetic* types (I call them) in the animal kingdom, exhibiting characters of Placoids (Selachians), in the teeth, Ganoids in the scales, their embryonic characters in the preservation of a dorsal chord, instead of distinct bony vertebrae, and finally hollow bones as in birds."

"CAMBRIDGE, December 23.

"I take it some of your naturalists will grow over what they will be pleased to call my stupendous mistake in referring the teeth of *Ceratodus* to the Selachians, when the fish proves to have large imbricated scales; and yet I never was more pleased than when I learned the fact, for it settles beyond dispute the existence in nature of types, to which I have long ago called attention, under the name of *synthetic types* (see my 'Essay on Classification'), but of which naturalists have thus far taken little or no notice. When I described the teeth of *Ceratodus* as those of a distinct genus among the Cestracionts, I was led to do so by appearances which secured for this association the assent of all naturalists. As long as the fossil teeth only were known, nobody questioned the relationship. Owen himself, in his 'Odontography,' mentions the teeth of *Ceratodus* and their structure, and has not a shadow of a doubt that I am right in placing that genus near Cestracion; and now comes the discovery that *Ctenodus*, a genus also referred to the Cestracionts, is based upon the dental plate of a bony fish, closely allied to the one recently discovered by Krefft, and referred by him to the genus *Ceratodus*. Is not all this the most palpable evidence that there exist in Nature types which combine structural features that are entirely separate in other types? and it is to such types I have applied the name of *synthetic types*."

War Notes.

Military Courage.

LOOKING merely at the facts, we find that they come pretty much to this—that the Germans have fought with great gallantry, and have never run away or refused to fight; that the French have fought with great gallantry too, but on not a few occasions have fled in utter panic, or else surrendered on the spot, after, to say the least, a very modest show of resistance. It would be unjust, however, on this account to pronounce the French to be inferior in military courage to the Germans. National prowess is not to be estimated, like shooting at a pigeon-match, by the number of marks scored on one side or the other. It is necessary to look at the conditions under which courage is displayed on the one side, or the want of it on the other. From the common talk about courage, one might fancy it was a fixed permanent quality; on the contrary, there is nothing so fluctuating and so dependent on varying external circumstances. There are not only many degrees, but many kinds of courage—individual and corporate courage, the courage of stupidity and of intelligence, of hope and of despair. And not only are there all these varieties of courage, but the same man may possess, or be possessed by, all of them at different moments. It was the surviving zouaves who fought so desperately at Wörth, who ran away so disgracefully at Paris. In the same journal we read that the Mobs with Garibaldi in the east of France are skulking in

ditches, scampering off across fields, or flinging themselves on the ground in abject terror, while other Mobs at Brie and Champigny on the Marne are attacking the Germans with impetuous and persistent daring. Yet in both cases the Mobs were drawn from the same stock, and if their positions had been exchanged would doubtless have behaved in the same way. Indeed, many of the very Mobs who ran away from Orleans in the first instance, displayed great bravery when first led back to Orleans by D'Aurelle, but again lost heart gradually in the three-days' fighting. The behavior of a body of troops is by no means an accurate measure of the personal bravery of the individuals composing it, or even of the majority of them. The 'courage corporate' which 'drags the coward to heroic death' is a familiar feature in the private history of armies. It may require more audacity to run away under the eye of comrades than to stop and fight; but, beyond this, there is an infectious spirit of bravery which is irresistible, and of which a very little leavening may at a propitious moment be sufficient to leaven the whole mass. Fear is equally contagious; and just as many a poor creature has been carried forward, helpless and unwilling, by the mere force of the surrounding enthusiasm, into some heroic exploit, so have brave men been similarly swept away in a tide of panic. If the plain unvarnished history of any war were written, not the least startling page would be that which recorded the large and continual desertions which are always thinning an army in the field.

War Seventy-five Years ago.

Terrible as are the sufferings of many of the wounded in the present war, and imperfect as the arrangements may be for tending them, they at least, as a rule, receive better treatment than the sick and wounded of the British army in Holland, in 1795, under the Duke of York. The accounts given in the records of the day show how scandalous was the conduct of the then military hospital authorities, and it is not surprising that the medical board, as well as the commissaries, became objects of great hatred and indignation. The following extract from a report of an eye-witness gives some idea of the condition of affairs:

"January 21, 1795.—Our" (the British) "hospitals, which were lately so crowded, are for the present considerably thinned. Removing the sick in wagons, without clothing sufficient to keep them warm in this rigorous season, has sent some hundreds to their eternal home, and the shameful neglect that prevails through all that department makes our hospitals mere slaughtering-houses. Without covering, without attendance, and even without clean straw and sufficient shelter from the weather, they are thrown together in heaps, unassisted and unprotected, to perish by contagion, while legions of vultures, down to the stewards, nurses, and their numberless dependants, pamper their bodies and fill their coffers with the nation's treasure, and all beasts of prey, fatten on the blood and carcases of their unhappy fellow-creatures, of whom not one in a hundred survives, but perishes under the infernal claws of these harpies, still thirsting for more blood, and rioting in the jaws of death. For the truth of what I say, I appeal to every man in the army who has only for a few hours observed with an attentive eye the general rule of conduct in our hospitals of late, and witness here the scene before me while I now write. A number of men lying on a scanty allowance of dirty wet straw, which, from the heat of their bodies, sends up a visible steam, unable to help themselves; and though a sufficient number of men are liberally paid for their attendance, none has been near for several hours, even to help them to a drink of water. Five carcases, covered only with the rags they wore when they were alive, are piled upon one another in the yard on the pretence that the

ground comes."

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ground is too hard to bury them until a thaw comes."

Dr. Russell, in a recent letter from Versailles, narrates the following incident: One of the great military chiefs was going to his quarters the other evening inside the princely precincts, when he was brought up by the point of a bayonet, and a demand for the password. The general had forgotten it. "I am General von —," he explained; "I have forgotten the pass." The sentry was a man of few words, but they were emphatic. In Polish-German, he merely observed, "I will shoot you!" and looked so very like it, that the general desisted from verbal controversy, and waited till a soldier from the post had returned with an officer to identify his excellency and give orders for his release.

In the recent fighting around Paris, the Germans and the French suffered equally; the casualties in killed and wounded are said to be seventeen thousand in the sorties alone. It is stated that the horses lying dead upon the field, already torn by shell, and many of them still warm, were eagerly utilized by the hungry French troops. It was, one writer says, a sight more singular than agreeable to see a group of officers and men hacking away with their knives, and occasionally their swords, at one of these red carcasses, and trying politely to outmanœuvre each other in the general struggle for the daintier bits.

The weather in France has lately been very inclement, and must greatly add to the sufferings of the soldiers in the field. The Germans have probably the best chance of keeping warm, for their upper coat is very substantial; the French *tentes d'abri* are not of much avail. The Germans before Paris have not received the sheepskin coats, said to have been on the way for them; but the outpost men have each a new thick blanket which they wear in the form of a plaid across the shoulders.

The Archbishop of Paris has paid a visit to the Breton ambulance. He urged the wounded to join their regiments again as soon as they recovered, and to continue to combat the enemies of France. He told them never to think of surrendering, but to fight for the deliverance of the country, and said he regretted that his ecclesiastical character prevented his shouldering a rifle on the ramparts.

General d'Aureilles's officers say that his military capacity was paralyzed by his putting himself into the hands of the Bishop of Orleans. The bishop inflicted a penance upon him, in consequence of which he remained on his knees for four consecutive hours at the altar of a saint, when he should have been attending to his business.

Miscellany.

The Diamond-Diggings.

THE centre of the diamond-producing district of South Africa may be conveniently indicated by the junction of the Hart and Vaal Rivers. According to recent advices, the strip of land between these rivers has constituted itself a republic, of which the capital is a town, actual or possible, called Klipdrift. The new state was raising, by conscription, an army of two hundred men, which was to be employed in putting down a rebellion at a place called Hebron, within its assumed frontier. The most remarkable event which had lately occurred in this district was, that a man who had found a diamond on another's "claim," had

had the honesty to give it up to him; and this appears to have been thought a very remarkable event indeed. The accounts which are sent home of the labors and disappointments of diamond-digging will probably have no effect in deterring fresh adventurers from following those who have already started in pursuit of fortune. There is, indeed, no reason why this emigration, having begun, should not proceed. The work is hard and the prizes are few, but the field of search is practically boundless. Each lottery contains many blanks, but there seems nothing to prevent the establishment of any number of lotteries offering equal chances. Hebron, the seat of rebellion, is described in a recent letter as "a very little, quiet place" on the Vaal River. The river here is three hundred yards wide, with trees on each side, and very pretty. A digger begins work at sunrise, and keeps at it, with intervals of half an hour and an hour for breakfast and dinner, until sunset. He breaks ground with a pick, carts the soil to the river, washes and sorts it. A young man of strength and resolution may support this life for a long time, in the hope of some day finding a prize; but it is a very hard life, and hope in many cases changes into despair. "I think," says a writer, "that in the long-run one is sure to hit on a big 'un." He and others will think this until they have expended their last penny in necessary supplies, and then they will leave the diggings, having learned that the conditions of life there are much the same as everywhere else. Some men starve, others barely live, and a very few grow rich. This writer has no time for rebellion, nor even for society. "After working all day, a fellow feels too tired to go out at night, and I generally read for an hour, and then go to sleep." Picking, carting, washing, sorting, form the daily round of duty. Shooting and fishing are allowed only for the pot, when the associated diggers become weary of invariable mutton. The tools and processes of diamond-digging are simple. The soil, after being picked and carted, is washed at the river-side in a cradle containing two sieves. "We put a lot of stuff in the top sieve, rock the cradle, while a Kaffre pours water on till all the small stones have gone through the top sieve, and the dirt is all off. We then look roughly over the big stones in the top sieve, and throw them away. The bottom sieve is then emptied on to a table, and we have to look carefully over the stones." "We" consist of the writer, his English partner, and a Kaffre. The serenity of Hebron is disturbed, not so much by the threatened invasion of the army of two hundred men from Klipdrift as by the reported proximity of bands of fighting Kaffres, who scare the working Kaffres from the cradles by threats of death if they continue at them.

The Broom, the Shovel, the Poker, and the Tongs.

I.

The Broom and the Shovel, the Poker and Tongs,

They all took a drive in the park,
And they each sang a song, ding-a-dong, ding-a-dong,

Before they went back in the dark.
Mr. Poker he sat quite upright in the coach,
Mr. Tongs made a clatter and clash,
Miss Shovel was dressed all in black (with a brooch),

Mrs. Broom was in blue (with a sash).

Ding-a-dong! ding-a-dong!
And they all sang a song!

II.

"O Shovel, so lovely!" the Poker he sang,
"You have perfectly conquered my heart!"

Ding-a-dong! ding-a-dong! if you're pleased
with my song,

I will feed you with cold apple-tart!
When you scrape up the coals with a delicate
sound,

You enrapture my life with delight!
Your nose is so shiny! Your head is so round!
And your shape is so slender and bright!
Ding-a-dong! ding-a-dong!
Ah! you pleased with my song!"

III.

"Alas! Mrs. Broom!" sighed the Tongs in
his song,

"Oh, is it because I'm so thin,
And my legs are so long—ding-a-dong! ding-a-dong!"

That you don't care about me a pin?
Ah! fairest of creatures, when sweeping the
room,

Ah! why don't you heed my complaint?
Must you needs be so cruel, you beautiful
Broom,

Because you are covered with paint?

Ding-a-dong! ding-a-dong!
You are certainly wrong!"

IV.

Mrs. Broom and Miss Shovel together they
sang,

"What nonsense you're singing to-day!"
Said the Shovel, "I'll certainly hit you a
bang!"

Said the Broom, "And I'll sweep you
away!"

So the coachman drove homeward as fast as he
could,

Perceiving their anger with pain;
But they put on the kettle, and, little by little,
They all became happy again.

Ding-a-dong! ding-a-dong!
There's an end of my song!

A Strange Murder.

The old saying that truth is stranger than fiction never had a more remarkable illustration than in the case of four respectable Hindoos, who are now undergoing a sentence of penal servitude for life in the Andaman Islands for a murder that they were alleged to have committed. One of the prisoners was a wealthy native merchant of Sholapoor, in the province of Bombay; his wife and her two brothers complete the number. The victim of the alleged murder was a poor boy of low caste, a chamber, or shoemaker. There was nothing to be gained by his death in any way, nor was there the least ill-feeling or jealousy, or any conceivable motive for such a crime. More extraordinary still, the crime was perpetrated in a house where more than twenty persons were sleeping over-night.

It would appear that the merchant of Sholapoor is a devotee of one of the innumerable religious sects of India—the Jains, who eschew animal food, and consider it a sin to kill even those little animals that flesh and blood cannot endure. Toward the close of 1887 he left home with his wife to visit his father-in-law at Madha, and then to go on to Eedur, a place sacred to his sect. He never got farther than Madha, the tragic events of his one night's stay putting an end to all thoughts of pilgrimages. The visit was of course an occasion for joy and festivity, and the father-in-law had engaged several strangers to help in the preparation of a banquet in honor of his son-in-law.

When all had retired for the night, they numbered about twenty, including some strangers. The house in which they slept stood alone, surrounded by a wall, which, however, does not seem to have been high enough to

keep out intruders. All the persons who are suffering sentence slept on the floor of the verandas or balconies in the front of the house, a common practice in India when the weather is very warm. It was about midnight when, all being fast asleep, and the lights put out, a noise was heard in the veranda, and cries of "Thief! thief!" and "Catch him! catch him!" The inmates arose; and there was a good deal of struggling and confusion. What occurred is matter of conjecture, but when the police officers entered from the outside with a light, the chamber boy was found lying dead with his throat cut, near the door of the veranda where two of the prisoners were sleeping. All the prisoners, and especially the merchant's wife, were marked with stains of blood; one of her fingers was cut and bleeding.

The woman's account of the affair was that during the night she felt some one sitting beside her, and touching her neck with his hand, as she thought to steal her ornaments. She then raised a cry of "Thief!" and, in the struggle that ensued, was wounded in the finger. It was then given out that the boy, having been caught in the act, committed suicide. When the case was before the magistrate, no other solution was suggested, and the accused were dismissed.

The mystery of the affair, however, excited a great interest, and many explanations were suggested. The theory of suicide was discredited as totally unworthy of belief. Gradually a horrid suspicion crossed the minds of some of the neighbors, and, assuming consistency as it was propagated from mouth to mouth, soon became accepted, and for the first time the accused were in danger. There existed once generally in India a cruel superstition; when hidden treasure was to be guarded, a boy of black color was to be murdered, and his spirit, so let free, would hover around the treasure and preserve it. This diabolical opinion is certainly not shared by the intelligent part of Bengal; it is doubtless confined to the ignorant and lowest class. It was not likely to be an article of faith to a wealthy merchant; and, still more, to the devotee of a sect that looked upon all animal sacrifice with abhorrence. Nevertheless, this theory of the murder was greedily swallowed, and a person claiming to be a relative of the shoe-maker-boy came forward and demanded a new trial. This was granted, and the result was that all the four prisoners were convicted, the jury putting faith in the strange story.

Women's Work.

If women want work, what doth hinder them from getting it? They flock to the school-houses for situations as teachers, till I doubt not there are twenty applications for every vacancy, and, in many instances, I know there are twice and thrice that number. They press against the doors of the Government offices, and, for one who is received, scores are sent disappointed away. They will be clerks, copyists, amanuenses, any thing which promises light employment, permits tasteful dress, and bestows even a moderate remuneration; and for this they will wait and pray and suffer. But to the fields that are really ripe for harvest, the laborers are distressingly few. It has been dinned and dinned into the ears of women that the place where they are wanted is the kitchen; but into the kitchen they will not go. They are sorely wanted in the sewing-room; but the sewing-room is to them an abomination. They have no taste for these things, it is said. It seems degrading to a girl of good education to assume the business of cooking or clear-starching; but there is a call for ten times as much mind, skill,

judgment, wisdom, in managing a cooking, or an ironing, or a sewing-department, as is required to count money or copy letters.

Sick-nursing is an occupation the most honorable, important, and remunerative. The demand for nurses is constant and urgent. They receive whatever they choose to ask. No skill, no training, no education, no refinement, is thrown away here. And it is a calling peculiarly womanly; so much so, indeed, that only the money earned puts it in the sphere of man. You would suppose that women would rush into it. On the contrary, they assiduously keep out of it. The scarcity is so great that the need is always pressing, often distressing, and not infrequently fatal. I am amazed, I am indignant to hear this outcry for a wider sphere and greater opportunities for woman, while her sphere is already a thousand times wider than she spans, and her opportunities a thousand-fold greater than she has ever attempted to measure. Every sphere under the sun is open to her but the do-nothing sphere. Every imaginable opportunity is offered her except the opportunity to sow tares and reap wheat. The cry for work, the clamor for a career, are the cry and clamor of weakness. Strong eyes see work, and strong hands do it, and say nothing about it. She who is equal to a career enters upon a career, and there is no flourish of trumpets. Be sure she who complains of obstacles is not the victim of obstacles.—Gail Hamilton.

The Rank of the States.

The rank of States, according to population, has changed since 1860, as shown by the following table. New York holds its own at the head of the line:

STATES.	Rank in Population.		Rank in Population.	
	1860.	1880.	1870.	1895.
New York.....	1	3,880,735	1	4,370,346
Pennsylvania.....	2	2,906,215	2	3,467,484
Ohio.....	3	2,339,511	3	2,632,302
Illinois.....	4	1,711,951	4	2,540,216
Missouri.....	5	1,182,012	5	1,714,102
Indiana.....	6	1,330,428	6	1,608,169
Virginia, West.....	7	1,596,318	10	1,309,667
Massachusetts.....	7	1,231,066	7	1,448,055
Kentucky.....	9	1,155,684	8	1,323,284
Tennessee.....	10	1,109,801	9	1,238,336
Michigan.....	16	749,113	11	1,184,158
Iowa.....	21	674,012	12	1,163,953
Georgia.....	11	1,037,386	13	1,179,808
Wisconsin.....	15	775,881	14	1,063,166
North Carolina.....	13	992,622	15	1,041,000
Alabama.....	13	964,201	16	1,002,000
New Jersey.....	21	672,035	17	896,672
Texas.....	23	604,215	18	850,000
Mississippi.....	14	791,205	19	831,190
Maryland.....	19	687,049	20	775,279
South Carolina.....	18	703,706	21	735,000
Louisiana.....	17	708,002	22	715,384
Maine.....	22	628,279	23	630,436
California.....	26	379,904	24	556,208
Connecticut.....	24	460,147	25	537,998
Arkansas.....	25	535,450	26	486,103
Minnesota.....	30	172,022	27	460,057
Kansas.....	33	107,206	28	353,182
Vermont.....	36	315,096	30	333,235
New Hampshire.....	37	326,073	31	317,976
Rhode Island.....	39	174,630	32	217,319
Florida.....	31	140,434	33	189,995
Delaware.....	32	112,316	34	192,285
Nebraska.....	35	28,841	35	116,888
Oregon.....	36	92,465	36	99,776
Nevada.....	41	6,557	37	44,686
District of Columbia		75,080		
Territories.....		150,230		
Total.....		31,443,321		38,098,463

The Mocking-bird.

The mocking-bird of Florida is described as rather a dissipated character. He forages about, singing in his neighbor's vineyard while he robs him, until the berries of the Pride-of-China are ripe, then he proceeds to have a regular frolic, acquires a habit of intoxication, and gets as drunk as a lord. It is curious to see a flock of these birds at this time. They become per-

fectly tipsy, and fly round in the most comical manner, hiccupping and staggering just like men, mixing up all sorts of songs, and interrupting each other in the most impudent manner, without any regard to the politeness and decorum that usually mark the intercourse of all well-bred society, whether of birds or men. They will fly about promiscuously, intrude on domestic relations, forget the way home, and get into each other's nest and families, just like the lords of creation. After the berries are all gone, and the yearly frolic is over, they look very penitent, make many good resolutions, join the temperance society, and never indulge again till the next season comes round, and the berries are ripe once more.

The Sleigh-ride.

Jingle! jingle! jingle! jingle!
Jingle, sleigh-bells, jingle! jingle!
As we swiftly, smoothly glide,
Seated snugly side by side,
Maud and I.
In the sky
Moonbeams clear and bright
Sparkling glow
On the snow;
By their crystal light,
Peeping from a heap of fur,
Two bright, lovely eyes I see,
Like twin diamonds they appear,
Shining, twinkling merrily;
While the silvery sleigh-bells jingle,
Jingle, jingle, jingle, jingle.

Round her waist I put my arm—
Am I doing any harm?
She don't show the least alarm,
For—I only keep her warm!
And the bright
Calm moonlight
Has such charms, you know,
As we glide
Side by side
Swiftly o'er the snow.
When her eyes upturn to mine,
Archly glancing, tempting sweet,
Can I help it then, I pray,
If our lips together meet,
And the sounds of kisses mingle
With the sleigh-bells' merry jingle?
Can I help it if each kiss
Wakens thoughts of future bliss?
Can I help my new-born love
When I ask if she will ride
Side by side
Down the tide
Of this stormy life?
If she'll be
Unto me
My own cherished wife?
"Yes," she whispers, sweet and low,
Closer nestling to my side.
There's no harm in kissing now,
Maud, my darling, promised bride.
Jingle! jingle! jingle! jingle!
Merry sleigh-bells, jingle! jingle!

A Spiritualist in Florence.

And now a word or two for remarkable persons whom I met in Florence. One of the most interesting was Mr. Kirkeup, the English artist, whose name will always be connected with Dante, on account of his exertions in restoring the Grotto portrait of the great poet, which can be seen in the frescoes of the Bargello chapel. Mr. Kirkeup is an ardent spiritualist, and believes that Dante visits him constantly. He speaks of Dante as we would of our next-door neighbor, and most intimate friend. Dante, he says, is a little vain of his personal appearance, and has been so gratified with the dis-

covery of the Bargello portrait, which is a pleasing one, that he secretly influenced the Italian Government to make Mr. Kirkcup a baron, and confer on him a distinguished order! It is very curious study to listen to the old gentleman's talk on the subject.

"Dante," he said, "told Regina" (a deceased friend of Mr. Kirkcup, through whom he believes he receives spiritual information), "that her guardian spirit held a higher rank than his. He begged her to ask this angel to promote him. Regina did so, and the request was granted. As soon as he received his advancement, Dante called on us, dressed in his new costume."

I asked, of course, what was the difference between the new and old dress.

"Oh, the first was all white! After his promotion his dress was blue, rose-color, and green. And, I assure you, Dante was very well satisfied with the change."

Mr. Kirkcup lives in a queer old house at the end of the curious Ponte Vecchio; its side windows look out on the Arno, and the river washes its foundation; the building used to be occupied by the Knights Templar. The rooms are filled with all sorts of rare old things, pictures, engravings, illuminations, bits of majolica, Venetian glass, all huddled together without order; among them I noticed some brilliant initial letters, painted by Gaddi. On an easel was a half-finished picture, for Mr. Kirkcup, though over eighty, still keeps up the practice of his art.

The Sailor's Grave.

The following poem is said to have been written by Campbell, though we believe it is not in any collection of his works:

There is in the wide blue sea

A spot unmarked but holy,
For there the gallant and the free
In his ocean-bed lies lowly.

Down, down beneath the deep,
Which oft in triumph bore him,
He sleeps a sound and peaceful sleep,
With the wild waves dashing o'er him.

He sleeps serene and safe
From tempest and from billow;
The storms that high above him chafe
Scarce rock his peaceful pillow.

The sea and him in death
They did not dare to sever;
It was his home while he had breath—
'Tis now his home forever.

Sleep on, thou gallant dead!
A glorious tomb they've found thee;
The bright blue sky is o'er thee spread
The boundless ocean round thee.

No vulgar foot treads here;
No hands profane shall move thee;
But gallant fleets shall proudly steer,
And warriors shout above thee.

When the last trump shall sound,
And graves of earth be riven,
Like the morning sun from the waves thou'lt
bound,
To rise and shine in heaven.

A Remarkable Journey.

Lieutenant G. C. Masters, of the English Navy, landed in April, 1869, in the Chilean penal settlement in the Straits of Magellan, made friends with a Patagonian cacique, named Orkake, studied his people, learned their language, joined their hunting-parties, and finally induced them to join him in a march of seven hundred miles to the Rio Negro. The chase lasted many months, and was one continuous march for food. In May, 1870, Lieutenant Masters, who had completely won

the confidence of the people, as that kind of man always does, marched eastward down the valley of the Rio Negro, and finally debouched at its mouth within the Argentine Republic. The climate was cold, but the Patagonians were pleasant people, and remarkable among savages for affection for their wives and children. Their country is wholly unknown to Europeans, and has never been traversed before.

Varieties.

THE Norway Maelstrom, of the old-school books—as most people know already—is a myth. At certain stages of the tide there is something like a whirlpool, and in bad weather the place is a dangerous one, even for large vessels; but if these are wrecked, it is by being dashed against the rocks, or by foundering—net by being drawn down into a vortex. In 1859, an official report on the subject was made by Mr. Hagerup, Minister of the Norwegian Marine, who says that more violent currents of the kind are to be found at other points on the coast of Norway, but the worst of them is not so bad as the Maelstrom of the old stories.

At a certain college the senior class was under examination for degrees. The professor of Natural Philosophy was badgering in optics. The point under illustration was that, strictly and scientifically speaking, we see no object, but their images depicted on the retina. The worthy professor, in order to make the matter plainer, said to the wag of the class: "Mr. Jackson, did you ever actually see your father?" Bill replied promptly, "No, sir." "Please to explain why you never saw your father." "Because," replied Mr. Jackson, gravely, "he died before I was born, sir."

Not long ago the criminal court in Galveston, Texas, adjourned at noon until three o'clock P. M. The judge failed to appear at that hour; and about four o'clock he entered the court-room, and, on taking his seat, said: "Mr. Clerk, enter a fine of one hundred dollars against Samuel Dodge, judge of this court, for being absent at the hour to which the court adjourned."

Professor Huxley has recently pronounced very decidedly in favor of the introduction of the Bible as a "reading-book" in common schools. The ground of his advocacy is, that there must be a moral substratum to a child's education to make it valuable; and that there is no other source from which this can be obtained at all comparable with the Bible.

The experience of a young lady who recently went shopping among the hair-dealers, proves that the kind of hair known as "blond hair," is worth more than its weight in gold. The precious metal can be bought for seventeen dollars the ounce, but the vendors of capillary ornaments demand twenty-five dollars for one ounce of "blond" hair.

The night-editor of a daily paper wrote this head-line to one of his cable dispatches: "The British lion shaking his mane." He was unable to eat his breakfast next morning, when he found the printer's version of the matter staring him in the face thus: "The British lion skating in Maine."

In speaking of the decline of interest in popular lectures, the *New York Commercial* says, the newspaper has taken the place of the lecture, and its discussions of the events of the time have the merit of freshness and honesty, if not of the elaboration and tediousness of the lecturer's hour-long homily.

The hunters of Siberia, when pressed by hunger, take two pieces of board, and, placing one on the pit of the stomach and the other on the back, gradually draw together the extremities, and thus allay in some degree the cravings of appetite. This is supposed to be a very economical kind of board.

Dr. Lankester, a London magistrate, has given notice that, in case any person shall come by his death through slipping on pavements from which the snow had not been removed, he will direct the jury to return a ver-

dict of manslaughter against the person through whose neglect the accident may have happened.

It costs about three hundred and seventy-five thousand dollars a year to "run" one of our crack naval frigates, after the snug sum of two million dollars has been swallowed in her construction. Fully manned and officered she carries six hundred and fifty souls.

A Paris correspondent writes: "All the animals in the Zoological Gardens have been killed, except the monkeys; these are kept alive from a vague and Darwinian notion that they are our relatives."

"Call that a kind man," said an actor, speaking of an absent acquaintance, "a man who is away from his family, and never sends them a farthing! Call that kindness!" "Yes, unremitting kindness," Jerrold replied.

A traveller says, he goes prepared for escape from burning hotels, by carrying in his satchel a coil of half-inch rope, forty or fifty feet long, knotted every two feet, to give a better hold. On two occasions, he has found it serviceable.

Photographers must be brilliant in controversial discussion, as, no matter how hard a subject may be presented to them, they are always prepared to take the negative and furnish proof of the correctness of their view.

The *Courrier du Bas Rhin*, the principal paper of Strasbourg and Alsace, has been purchased by a German publisher, and a German has been installed as chief editor.

There are in the State of New York one hundred and thirty-three savings-banks, with assets amounting to two hundred and twenty million dollars.

A clairvoyant doctor of Hartford proclaims his superiority over all soothsayers, astrologers, prophets, by advertising that he "foretells the past and present," as well as the future.

A medical journal estimates that the people of the United States pay one hundred and twenty-five million dollars yearly for physicians' services and for medicines.

The South-African "diamonds," supposed to be worth, some of them, from ten to three hundred thousand dollars each, are pronounced, in London, to be merely clear lumps of quartz.

Ladies' paper skirts, costing but fifteen cents, are becoming common. The paper is of great tenacity, and does not easily tear. It is of various colors.

The ladies of Newport and Saratoga are outdone by the wife of Mehemet Ali, who required five hundred camels to transport her baggage, when she went a-visiting.

"Mamma, can a door speak?" "Certainly not, my dear." "Then, why did you tell Anne, this morning, to answer the door?" "It is time for you to go to school, my dear."

A London paper says that the Americans are the readiest speech-makers the world has ever seen.

"A prudent man," says a witty Frenchman, "is like a pin: his head prevents him from going too far."

An acre of land has been sold in the city of London for three million six hundred thousand dollars.

It has been discovered that bull-fighting is an amusement in China.

A farmer gathers what he sows, while a seamstress sews what she gathers.

A poetical genius describes ladies' lips as "the glowing gateways of pork and potatoes."

As we often hear of flying bricks, we ought not to be astonished at hearing a chimney flue.

Cotton was first planted in the United States in 1759.

It is a curious paradox that men of the smallest calibre are often the greatest bores.

A flourishing business—ornamental penmanship.

The man who works with a will—the probate judge.

The Museum.

THE religion of the Maories, or native New Zealanders, is a curious mixture of simplicity and elaboration, having the usual superstitions common to all savage tribes. Of real religion they have no idea, and, as far as is known, even their superstitions lack that infusion of sublimity which distinguishes the religious system of many savage nations. They have a sort of indefinite belief in a good and evil influence; the former going by the generic name of Atua, and the latter of Wairua. Now, Atua is a word that has a peculiar significance of its own. It may signify the Divine Essence, or it may be applied to any object which is considered as a visible representative of that essence. Thus, if a Maori wishes to speak of God, he would use the word Atua. But he would equally apply it to a lizard, a bird, a sun-ray, or a cloud. There is one species of lizard, of a lovely green color, called by the natives *katariki*, which is held in the greatest veneration as a living representative of divinity, and is in consequence always dreaded as an atua.

Objects which they cannot understand, are often considered by the Maories as atuas. Thus, a compass is an atua, because it points in one direction, and directs the traveller by its invisible power. A barometer is an atua, because it foretells the weather. A watch is an atua, on account of the perpetual ticking and moving of the hands. Fire-arms used to be atuas until they came into common use, and lost the mystery which was at first attached to them. Yet the Maori never addresses his prayers to any of these visible objects, but always to the invisible Atua of whom these are but the repre-

sentatives. While there are many representations of the human form in New Zealand, which are supposed by travellers to be idols, it is doubtful whether images of worship ever existed among those tribes. It was formerly supposed that the green jade ornaments, called "tikis," which are worn suspended from the neck, were idols; but it is now known that

they are merely ornaments, deriving their sole value from being handed down from one generation to another. Our illustration is an example of one of the so-called idols, which is remarkable for its gigantic proportions and curious shape. It is about sixteen feet in height, and, instead of consisting of a single human figure, as is usually the case, the enormous block of wood is carved into the semblance of two figures, one above the other. This arrangement is not uncommon in New Zealand, and is found also in Western Africa. It stands, together with several others, near the tomb of the daughter of a native prince, and is one of the finest examples of native carving to be found in New Zealand. The precise object of the tiki is uncertain; but the protruding tongue of the upper figure seems to show that it is one of the numerous defiant statues which abound in the islands. The natives say that the lower figure represents Maui, the atua who, according to Maori tradition, fished up the islands from the bottom of the sea. As may be seen by reference to the illustration, nearly the whole of both figures is carved with most elaborate curved patterns, which descend over the arms, and adorn those parts of the statue which denote duty for hips. A portion of the paling surrounding the tomb of the princess is seen in the background, and around the tiki grow many plants of the pohium, or New-Zealand flax.

Near this wonderful and mysterious piece of carving stand several others, all of the ordinary type. Although not quite so large as the double tiki of Raora, they are of very great size.

The firmest belief in witchcraft prevails in New Zealand, though not to such an extent as in many parts of Africa.



A New-Zealand "Tiki."

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CONTENTS OF NO. 100, FEBRUARY 25, 1871.

	PAGE
PICTURESQUE AMERICA: A Nook on the Hudson. (Illustration.)	213
OUR VISIT TO MOUNT VERNON.....	214
BERNARD'S INVENTION: I. (Illustrated.) By Christian Reid.....	216
SOAP AND PERFUMERY. By N. S. Dodge.....	220
THE PHILOSOPHY OF BORROWING.....	222
LÉON GAMBRETTA. By George M. Towle.....	223
OUR NATIONAL GAME. By William E. Hooper.....	225
A MIDWINTER-DAY. By Myron B. Benton.....	226
THE BOHON-UPAS-TREE. By H. W. Dodge.....	227
A CAVALIER TO HIS SWORD. By Joseph O'Connor.....	227
ICE. (Illustrated.) By L. P. Brookett.....	228
UNCLE SAM'S STRONG BOX. By Laura M. Doolittle.....	232
TABLE-TALK.....	234
LITERARY NOTES.....	235
SCIENTIFIC NOTES.....	236
WAR NOTES.....	236
MISCELLANY.....	237
VARIETIES.....	239
THE MUSEUM. (Illustrated.).....	240

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